

# PHILADELPHIA MEDICAL TIMES.

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## ORIGINAL LECTURES.

### CLINICAL LECTURE ON A CASE OF LITHIASIS.

*Delivered at the Philadelphia Hospital*

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GENTLEMEN,—The patient whom I bring before you for clinical study to-day is a man 77 years of age, a native of Philadelphia, by occupation a travelling agent.

He has been complaining for several months of an almost constant vertigo, which keeps him in fear of falling when on his feet. His ordinary condition of health has been very good, and he has spent an active life, which renders him quite restive in his present condition. He has been under the observation of several physicians; was sent to the nervous ward with the idea that his condition might be due to some cerebral lesion, and was returned to the medical ward, where I saw him yesterday for the first time.

His condition reveals to the examiner no symptom of prominence; and it is indeed this absence of marked symptoms, together with the suggestiveness of a cluster of minor symptoms, which induces me to bring him before you, as it is very important that the practitioner shall be familiar with these.

Let us look into his face. We note two points of suggestive interest. Upon each cornea, as we elevate the upper lid, we see a well-marked *arcus senilis*, and upon each cheek may be seen the *red branching twigs* of dilated arterioles. His hands are cold, and he says his feet are also always cold. On feeling the pulse, the radial artery is found *thickened and cord-like*, with a slight but palpable tendency to "beading." The pulse itself is sustained and incompressible, indicating *increased arterial tension*, which is the more remarkable in this case as the patient is not what may be called "full-blooded," but rather the contrary. Finding this "fibrosis" of the radial artery, we examine the temporal, and find it also fibrous, and much more tortuous than normal. With these changes in the vascular

system, our attention is naturally directed to the heart. Searching for the apex-beat, we find it without difficulty in the sixth intercostal space and without the mammary line, striking the chest with considerable force, and indicating *left ventricular hypertrophy*. Auscultation reveals an *accentuation of the aortic second sound* as the only abnormal auscultatory phenomenon.

Now, not one of these symptoms may be classed as prominent, and, with the exception of the *arcus senilis*, all of them might easily escape superficial observation. But their coexistence is very suggestive, and our attention is at once directed to the kidneys, to discover a clue, if may be, to the *fons et origo* of these circulatory modifications.

He informs us that he is obliged to mic-turate frequently during the night, and that, without ever having actually measured the quantity, he is confident that it is considerably in excess of the norm. I here show you a specimen of it. It is very pale in color, with a specific gravity of 1010; and on testing for albumen a faint white trace is seen bordering the line of the acid. The presence of albumen is not requisite to finish the clinical picture, although its presence strengthens the convictions furnished by the other symptoms; but you may remember that in the form of kidney disease with which this patient suffers albuminuria is frequently absent at this stage. Opportunity has not as yet been afforded me to examine the urine microscopically, and consequently I pass this feature by.

Let us consider the proper interpretation of these varied symptoms, and endeavor to fit them together so as to create, if possible, a true clinical picture of the case.

The *diuresis* furnishes us with the key, and the *increased arterial tension, hypertrophy of the left ventricle, and accentuation of the aortic second sound* unlock the mystery.

This patient is suffering from a condition referred to in the old nomenclature as "suppressed gout," or the "uric-acid diathesis," and in later times by Murchison as "lithæmia," and by Fothergill as "lithiasis." The investigations commencing, according to Fothergill, with James of Exeter in 1817, and continuing up to the present day in the researches and writings of Bright, Rokitsansky, Traube, George Johnson, Handfield Jones, Gull and Sut-

ton, and many others, have pretty clearly demonstrated each step in the process of abnormal changes, and associated them directly with chronic renal disease of the form variously known as "interstitial nephritis," "granular kidney," "gouty kidney," etc.

Although Gull and Sutton hold the condition to be a general fibroid diathesis or an "arterio-capillary fibrosis," essentially general, in which the kidneys *may* share, though not necessarily, still, most observers consider the condition to be due primarily to the diseased state of the kidneys.

These organs, when interstitial nephritis has become established, are believed to remove imperfectly the retrograde materials from the blood, which, remaining in the circulation, excite a resistance in the arterioles, either by directly irritating to contraction their muscular walls, or by irritating the vaso-motor centres. The resistance thus induced limits the escape of blood from the arterial system and keeps this system over-distended. Resistance to the proper emptying of these vessels induces increased force of the left ventricular systole, leading to the gradual development of the muscular walls, or, in other words, to hypertrophy. An hypertrophied heart at one end of the arterial system and resistant arterioles at the other induce the most characteristic symptom of this affection,—viz., the *high arterial tension*. The sustained high arterial tension, with an hypertrophied ventricle driving a new increment of blood into the arteries with each systole, induces the arterial fibrosis, which can ultimately be recognized as atheroma in the superficial arteries, and which constitutes at once one of the marked features of the condition and one of the most disastrous results of the disease, in the constant danger of apoplexies from the rupture of such "rotten vessels."

But, you may ask, if this patient has renal disease, why has he not dropsy?

The increased urination, brought about by the high arterial tension, prevents hydraemia. At a later stage of the disease, when diuresis disappears, dropsies show themselves. Again, you ask, why are there no uræmic symptoms? I have called your attention to a symptom which may be classed as uræmic. I refer to the increased arterial tension due to the contracting arterioles. The materials for excretion, collecting by degrees, excite this condition,

and this serves as a preventive of further toxæmia. Even in the healthy kidney, whatever increases the amount of water voided increases absolutely, even though not relatively, the amount of solids excreted; and this rule holds good also in all cases where the organ is diseased.

The safety of patients with granular kidneys lies, then, in the increased arterial tension, which, by increasing the leakage of water by the kidneys, washes from the blood so much of the nitrogenous waste as to prevent uræmia. Later in the disease, when, from cardiac failure or increased renal disability, the equilibrium is lost, uræmic symptoms are extremely prone to occur, and frequently induce the fatal termination.

I believe the vertigo of which this patient complains is due to the condition of the blood supplied to the cerebral tissue. It may be simply due to cerebral anæmia, but I am inclined to ascribe it to the toxæmia. The treatment which I institute will decide if the latter view is correct.

The prognosis of this case is favorable so far as lease of life is concerned, compared with other chronic renal diseases. The age of this patient goes far towards increasing the danger of apoplexy, by adding, to the rottenness of vessels induced by the disease, that which is due to senility. The disease may be arrested, but the changes already instituted cannot be removed.

The treatment mainly concerns three indications.

First. *Rest*, to limit tissue-waste and avoid further toxæmia.

In some cases moderate exercise in the open air may, however, be very useful by aiding in the oxidation of the retrograde materials and the formation of that most soluble of all excretory products, urea, and in this manner lessening the toxæmia.

Second. *Diet*, excluding as far as possible the proteids, allowing them to be used only so far as they may be required to supply tissue-waste.

Third. The administration of such substance as shall render more soluble, and hence more readily excreted, the nitrogenous waste. If this material of tissue-waste be largely lithic or uric acid, as the names given to the condition by Murchison and Fothergill of "lithæmia" and "lithiasis" would suggest, some material forming a soluble salt with this is indicated. It has been found that urate of lithium is the

most soluble of the urates; and we will administer to this patient the carbonate or citrate of lithium with this intention, giving ten grains thrice daily, expecting thus to benefit both the urinary and vascular systems.

*Supplement.*—The patient, though tottering in his gait, had walked down to clinic, and after the lecture had remounted the stairs to the medical wards in the third story. At his evening visit, my resident, Dr. Hancock, found him slightly aphasic, and by morning he was entirely so, although still appearing to comprehend what was said to him. His intellect gradually clouded, in spite of remedies, and he died in five days.

The autopsy verified the diagnosis. The kidneys were reduced to little more than half their normal size, and presented an almost infinity of "retention cysts," both on the surface and in the tissue, besides all the macroscopical evidences of the "granular kidney."

On removing the calvaria, a large quantity of cerebro-spinal fluid escaped. The brain was handed over to my colleague Dr. Mills to examine, who reports as follows:

"The brain has a general and marked anæmic appearance. Arteries of the base are all more or less rigid, the 'circle of Willis' being so rigid as to retain its shape after its removal. The pia mater easily stripped off, having evidently been dissected off by a serous effusion beneath. There are no gross lesions. There were numerous small spots, particularly in the pons and medulla, due to minute extravasations of blood."

*Comment.*—The interest in this case lies in the extensive changes in the arterial and renal tissue, with the absence of any marked symptom. As stated in the lecture, it was the cluster of symptoms which made it possible to make a positive diagnosis of so grave a lesion of the kidneys, even in the entire absence of dropsy and with only the most meagre suggestion of albuminuria.

**TREATMENT OF OBSTINATE EPISTAXIS.**—A combination of subacetate of lead (twelve parts) and opium (one part), of which two grains (thirteen centigrammes) may be given in a pill every two hours, has been successfully used by Dr. Roth.—*Memorabilien*, Heft 5, 1881.

THE death of Prof. Oscar Simon, the well-known dermatologist of Breslau, is announced.

## ORIGINAL COMMUNICATIONS.

### PERFORATING ULCER OF THE FOOT, AND DYSTROPHIC ARTICULAR CHANGES IN LOCOMOTOR ATAXIA: THEIR PATHOLOGY AND SURGICAL TREATMENT.

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**I**NASMUCH as surgical text-books give very meagre information upon the diseases under consideration, I trust the following record of my inquiry may prove not only interesting, but of practical value. Agnew, Ashhurst, Bryant, Clarke, Erichsen, Fergusson, Follin and Duplay, Gant, Gross, Holmes, Hamilton, Markoe, Macnamara, Spence,—all very high surgical authority,—have totally ignored the subject of the arthropathies of locomotor ataxia, although revelations concerning these affections had been made in 1868.

Curiously, too, surgical authorities have almost unanimously failed to elucidate the clinical features, pathology, and treatment of

#### PERFORATING ULCER OF THE FOOT.

*Clinical History.*—Erichsen\* says, "Perforating ulcer of the foot consists in a sinus that traverses the foot between the metatarsal bones. It is unconnected with any disease of the osseous or articular structures, and occurs in otherwise perfectly healthy persons." He continues that the mode of origin is as follows. A hard corn or *bunion* forms on the plantar surface of the foot, inflammation attacks the tissues beneath the callus, pus forms, and, finding no exit through the thickened cutaneous structure, burrows upward, and makes an opening on the dorsum of the foot, leaving an intractable sinus. He recommends the passing of a seton from the dorsal opening through the sinus and plantar callus.

Gross,† Hamilton,‡ Holmes,§ add nothing to the above description. Ashhurst|| assigns the same cause and mode of production, but adds that caries and necrosis of the bones may result. In this latter condition he considers amputation through the metatarsus preferable to excision, al-

\* The Science and Art of Surgery. Philadelphia, 1874.

† System of Surgery. Philadelphia, 1873.

‡ Principles and Practice of Surgery. New York, 1876.

§ System of Surgery. New York, 1874. Surgery: its

Principles and Practice. Philadelphia, 1876.

|| Principles and Practice of Surgery. Philadelphia, 1871.

though he says Kramer, Pancoast, and others have successfully performed the latter operation.

Follin and Duplay simply describe a *superficial* perforating ulcer of the foot. Agnew, Billroth, Gosselin, Markoe, Macnamara, Paget, and Spence make no mention of the disease.

Bryant\* is the only text-book authority who gives an accurate description of *true* perforating ulcer of the foot; but this he borrows from Nélaton.† In the treatment of the disease he follows Hancock.‡ He further (and rightly) informs the reader that "these cases are not to be confounded with the suppurating bursæ or bunions found in feet deformed from short or tight boots."

A most excellent account of the history, symptomatology, diagnosis, and treatment of this disease is contained in Sédillot's "Contributions à la Chirurgie."§

Following a review of the history of the affection comes a description *in extenso* of two cases which had fallen under M. Sédillot's care. Since they have a bearing upon the case which came under my observation, to be described farther on, I herewith give an abstract of them.

*Case I.*—W., æt. 55, journalist, greatly broken in health, had previously suffered frost-bite in the foot now affected. First noticed pain over a spot of the plantar surface corresponding to the metatarso-phalangeal articulation of the fifth toe. A *blister* here formed, ruptured, and secreted thin fluid. Ulceration commenced, the surrounding skin began to harden. The ulcer extended upwards towards the bones of the joint. Rest and stimulating applications relieved temporarily, but the ulceration afterwards increased in depth. When seen by M. Sédillot, the ulcer was quite large, with marginal induration; the tissues at the bottom were "boggy," the bones carious and necrosed. A large piece of bone was removed; but so much bone was found diseased that it was deemed best to amputate the little toe and metatarsal bone, which was done. Healing proceeded satisfactorily until the twentieth day, when a gangrenous spot in the centre of the cicatrix was observed. Probing detected dead bone. On the twenty-sixth day M. Sédillot intended to perform Lisfranc's operation, but, finding the tarsal bones spongy, altered, and softened, and on account of the man's greatly-deteriorated health, he amputated the leg at the point of election by the

anterior-flap method. The patient recovered in due time, with a useful stump.

*Case II.* was less serious. The amount of dead bone was small; became exfoliated. Repeated applications of the actual cautery were employed during the treatment. The ulcer healed after a slight relapse.

M. Sédillot draws especial attention to the occurrence of these ulcers in broken-down subjects, although claiming that they are not confined to such. He refers to one of his cases occurring in a man in the higher walks of life, which he at first treated successfully. A relapse and subsequent operation (inferred, though not so recorded) proved fatal. No particulars are vouchsafed.

M. Sédillot considers the affection to be an ulcer pure and simple, due to injury, mechanical pressure, etc.

He refers to two cases of M. Macker: || one, a soldier, æt. 49, broken down by alcohol, in which disarticulation of the toe did not prevent a return of the disease, which terminated fatally some years later; the other, male, æt. 64, alcoholic, in which ablation of the fifth metatarsal bone produced a lasting cure.

He also cites cases of MM. Bertrand and Potier-Duplessy, ¶ in one of which cure followed disarticulation of the fifth metatarsal bone.

Henry Hancock, F.R.C.S., reported\*\* a case of this disease in which he performed a modification of Pirogoff's amputation with success.

He reported three other cases communicated to him by Mr. Wilks, in which the question of heredity arose, since the patient's ancestors or brothers or sisters had been similarly affected. In one of these cases Syme's operation proved successful after a previous partial removal of the foot.

Mr. Hancock refers to the case reported by Vesignié†† (d'Abbeville), mentioning the latter's high regard for arsenic in the treatment of this disease. This mineral, as well as all other medicaments, external and internal, has been proved to be inert in controlling or curing this affection.

M. Nélaton‡‡ pronounced this an incurable affection. He described it as commencing as a phlyctæna, which bursts, secretes a thin fluid, and is followed by

\* Practice of Surgery, p. 408. Philadelphia, 1873.

† Gazette des Hôpitaux, January, 1852.

‡ British Medical Journal, June 26, 1869.

§ Two volumes. Paris, 1868.

|| Comptes-Rendus de son Service à l'Hôpital Colmar.

¶ Rec. de Mém. de Méd., de Chirurg. et de Phar. Milit., June, 1865.

\*\* British Medical Journal, June 26, 1869, p. 585.

†† Gazette des Hôpitaux, February 5, 1852.

‡‡ See letter to British Medical Journal, June 26, 1869, p. 586.



progressive ulceration. Undoubtedly this is the more usual mode of origin.

In a more recent article by Messrs. Savory and Butlin,\* a most excellent review of the literature, pathology, and treatment will be found. They record five cases, of which the following are the salient points.

*Case III.*—Ballet-dancer, æt. 40 years, had suffered from suppurating corns.

Present condition: Constant and profuse sweating of the feet; anæsthesia of both feet and legs; arteries of legs small; pulse in right foot very feeble; three ulcers in sole of each foot,—viz., centre, and on either side of great and little toes, on line with metatarso-phalangeal joints. Ulcers in worse condition on right side. Poulitices; pieces of bone discharged. Ulcers healed, but thickening at site of each remained.

*Case IV.*—Stableman, æt. 44. Suppurating corn, followed by perforating ulcer of right foot of three years' standing. Poulitices; exfoliation of bone; ulcer healed. Three years later, readmitted to hospital with large ulcer (size of a shilling) under left great toe, near metatarso-phalangeal joint. Amputation of great toe; metatarso-phalangeal joint denuded of cartilage, and bone carious. In a month wound healed.

*Case V.*—Porter, æt. 41 years. Suppurating corns, extending over a period of twelve years. Ulcer of sole at head of fifth metatarsal bone, right foot; fistulous opening on dorsum almost opposite site of ulcer. Little toe (and metatarsal bone) amputated. Ulcer nearly healed when discharged from hospital, but dorsum of foot considerably swollen; skin dusky red.

*Case VI.*—Clerk, æt. 27. Ulcer of nearly fifteen years' duration. Ulcer of right foot at middle and inner portion of sole, one and a half inches diameter, not far from base of the toes. Anæsthesia of the whole foot and lower portion of the leg; partial anæsthesia as high as just above the knee; movements and locomotion good. Ulcer first appeared under base of great toe. Leg amputated below knee; recovery. Anæsthesia unchanged.

*Case VII.*—Hostler, æt. 27 years. Suppurating corn; ulcer over fifth metatarsal bone; dead bone. Excision of the metatarsal bone; healed. Great perspiration of foot. Year later, pain, swelling, callus. In centre of latter a hole leading down to cuboid bone; carious. Syme's operation; stump healed. A while after, fell on stump; abscess; ulcer of stump. Poulitices; ulcer healed. Then another abscess and ulcer of stump. Amputation through the *tuber tibiae*. Recovery; cure.

While in all of these cases the ulcers were preceded by suppurating corns, never-

theless the corn, as well as the subsequent destruction of tissues, depended upon the same cause,—not mechanical violence *per se*, but deteriorated nervous (and circulatory) vitality.

As a further elucidation of the clinical history of this disease, I will here as briefly as possible record a case which fell under my own observation about three years ago.

*Case VIII.*—Locomotor Ataxia, Second Stage; Perforating Ulcer of the Foot; Special Arthropathy; Limited Operation; Death.

Male, æt. about 45 years; American; retired from business; no syphilis; a sufferer from locomotor ataxia for several years; can walk better now than a year ago. Treatment by tonics, nervous remedies, change of climate, electricity by advice of many and eminent physicians, has availed nothing. About four years ago an abscess formed over dorsal surface of the metatarso-phalangeal joint of the left great toe, opened, discharged for a long time, finally healed by use of solution of carbolic acid. For a year past, troubled with two discharging ulcers, plantar surface of metatarso-phalangeal articulation of the great toe of each foot. They began as small ulcerating points, with increasing callous edges. Had been advised to apply tinct. iodine thereto.

*Actual Condition.*—Pale, careworn countenance; anæmic, nervous, and irritable; memory slightly impaired; quick, nervous speech; occasional headaches; no prominent ocular symptoms; no incoördination of facial, labial, or glossal muscles; fair appetite; no *crises gastriques*; only occasional constipation; genital organs cold and flabby; anaphrodisia; frequent micturition; urine normal; muscles flabby,—of lower extremity slightly atrophied; dulness of general and tactile sensibility; slight impairment of hearing; reflectivity exaggerated; marked incoördination of lower extremities, with some paresis; difficulty, at times pronounced, in buttoning his clothes; muscular power in arms much diminished; walks with two canes or by aid of a person's arm.

*The Ulcers.*—Widely-extending, very thick callus. In centre thereof a small opening, admitting end of probe. Thin serous fluid exudes from right, none from left, opening. The callus having been pared away, two superficial, indolent ulcers remain, the right larger than the left. Although they seem to be superficial, and probe detects no sinus or bone, they are believed to be connected with a deeper trouble.

*Course, etc.*—Rest, stimulating local applications, phosphide zinc and iron internally. On the twelfth day of treatment, the left ulcer having almost completely healed, and the right greatly improved, the right foot (especially the anterior two-thirds) became greatly swollen. Patient had "stubbed" the right

\* Medico-Chirurgical Transactions, second series, vol. xlv., 1879, pp. 373 to 393, with three plates.

great toe on the previous day. The greatest amount of swelling was located about the metatarso-phalangeal joint of this toe, with the feeling of effused fluid. No pain. Skin shiny and bluish-red cast. Parts slightly hot to touch. Overextension the only movement which caused pain (slight). Never suffered from a like trouble before. In a week the swelling, excepting in and around the big toe, had subsided, aided by use of elastic bandage. Previous to the appearance of this complication the patient had improved in appetite and strength; but this new feature rendered him very despondent and took away his appetite.

About the twenty-third day of treatment, sloughing of the tissues about the right ulcer began, so that eight days later it was much increased in size. Swelling about and infusion into the joint remained. At this time a serous fluid began to flow from this ulcer, saturating the dressings. The tissues at the bottom were "boggy." For the first time, denuded bone could be detected, apparently of small amount.

The patient urging a resort to such treatment as would give encouragement of healing the parts, on the succeeding eighth day a small incision was made through the base of the ulcer, and two carious and partly-detached Wormian bones removed. At the bottom of the wound the denuded opposite ends of the metatarso-phalangeal bones of distal end of the second metatarsal bone could be detected. A large quantity of serous fluid flowed away on making the incision. Carbolyzed oil and oakum dressing. Good reaction from ether. On second day, mild surgical fever; broken up in three days by Warburg's tincture.

In spite of quinia, iron, and stimulants, the patient became more and more debilitated. His surroundings were of the most depressing and harassing character.

No action of repair in the wound appeared. Progressive denudation of the proximal phalanx of the great toe, to a lesser degree of the first metatarsal bone, took place. The surface of the bones seemed to fade away, not the least inflammatory action or pain in the osseous or surrounding tissues attending. Mild traumatic fever reappeared, and death occurred twenty-three days after the operation.

The special features of this case were dystrophic changes in the skin and subcutaneous connective tissue in the form of ulcers; dystrophic arthropathy; trophic degeneration of the bones of the foot; fatal result from a slight traumatism and small loss of blood in an ataxic subject.

This case well illustrates not only perforating ulcer of the foot, but the special arthropathy of locomotor ataxia, which we shall presently consider.

*Pathology.*—The pathogeny of this dis-

ease is not yet settled. MM. Duplay and Morat\* have made very careful investigations, and found, first, vascular changes, as more or less pronounced endarteritis; second, nerve-lesions. As M. A. Vulpian tells us,† the former condition had been pointed out by MM. Dolbeau, Pean, and others, who considered them the consequence of the ulcerative process. Although M. Poncet‡ had previously described the condition of the nerves neighboring the ulcer, MM. Duplay and Morat were the first to demonstrate that these changes, even at some distance from the ulcer, are similar to those occurring in the peripheral segment of a divided nerve. While they consider these nerve-changes essential to the production of perforating ulcer of the foot, they avow that science is not yet sufficiently advanced to speak positively of the mechanism of its intervention. They add, "It is possible that the anæsthesia and trophic derangements concomitantly play a certain part in the development of the ulcer."

M. Vulpian thinks that lesions of vasomotor nerves, even if they exist in this disease, can exert only a secondary influence.

In the main, Messrs. Savory and Butlin agree with MM. Duplay and Morat. They summarize as follows: "We should say, then, that the defects of sensation and nutrition which are observed in connection with perforating ulcer, and of which latter the ulcer is one of the most marked symptoms, are due to absence or degeneration of the sensory and nutritive fibrils of the supplying nerves, and that, in many cases of peripheral disease at least, these fibrils suffer as the direct result of mechanical pressure produced by increase of the endoneurium of the nerves, whilst the motor fibrils escape, owing to their larger size and thicker medullary sheath."§ They add that the causes of the production of this thickening of the endoneurium may be numerous. Several times they found it in limbs in which rigid or calcareous vessels were present.

*Treatment.*—We have seen that M. Sedillot recommends the actual cautery in mild cases, combined with rest and stimulating applications. In more severe cases

\* Archives Générales de Médecine, Mars, Avril, Mai, 1873.

† Leçons sur l'Appareil vaso-moteur. Paris, 1875, t. ii. p. 400, 401.

‡ Rec. de Mém. de Méd., de Chirurg. et de Phar. Milit., 1864; and Gazette Hebdomadaire, 1872.

§ Op. citat., p. 384.

he resorted to partial or complete removal of the foot.

Hancock condemns the placebo treatment of Vesigné and the *laissez-aller* method of Nélaton, advising the removal of dead bone and an attempt to heal the parts. He continues: \* "But if, notwithstanding, the disease returns, there can no longer be a question that when once perforating ulcer of the sole of the foot is established and recognized it is better at once to remove the whole of the metatarsal bones, either by Chopart's, Syme's, or Pirogoff's amputation."

Messrs. Savory and Butlin recommend prolonged rest; but they declare that even when the ulcers heal by this method they are prone to reappear soon after a return to locomotion. In some cases they would try the application of an artificial leg to the bent knee, thereby taking off all pressure from the foot and leg. Failing in this, excision of the diseased bones. As a last resort, amputation beyond the limit of the anesthesia.

In the light of recorded cases and the pathology of the disease, our duty would seem to be,—

a. In cases where there is no diseased bone, to advise prolonged rest, stimulating applications or poultices, and attention to the shape of the shoes after healing has been accomplished.

b. Removal of all dead or carious bone that can be reached without materially enlarging the already existing ulcer, with subsequent antiseptic and stimulating dressing to induce repair. The patient's constitutional condition should be given careful attention.

c. When the disease is confined to either the first or fifth metatarso-phalangeal joint, the denudation and destruction of bones being of any extent, amputation of either toe, including the metatarsal bone, should be performed.

d. A relapse following such operation, Chopart's, Pirogoff's, or Syme's operation is indicated. In some subjects of greatly lowered vitality (see cases of Sédillot and Savory and Butlin) amputation of the leg would be safer.

#### THE ARTHROPATHIES OF LOCOMOTOR ATAXIA.

*Historical.*—M. J. M. Charcot first described† the special lesions of the joints

occurring in certain cases of posterior spinal sclerosis (primitive posterior systematic leucomyelitis, *Vulpian*†). Drs. J. K. Mitchell,§ Sir William Gull,|| Scott Alison,¶ S. Weir Mitchell,\*\* Brown-Séquard,†† and others had observed arthropathies of neural origin as complications of Pott's disease, hemiplegia, paraplegia, etc. Since M. Charcot's communication, several authors have treated this subject, as Benjamin Ball,‡‡ Allbutt,§§ Buzzard,|||| S. Weir Mitchell,¶¶ and M. A. Vulpian.\*\*\* The latter has aptly summarized the special features of these affections: "*En résumé*, sudden periarticular swelling, with very rapid development; considerable distention of the joint; little or no fever at the outset; absence of pain; later, abnormal mobility of the joint,—such are the clinical characteristics: rapid destruction of the osseous tissue, without tendency to the formation of osteophytes in the vicinity of the destroyed tissue,—such are the anatomical peculiarities."

Charcot,††† whose observations I epitomize, pointed out that this affection generally appears simultaneously with the motor incoördination, sometimes even preceding the latter. The swelling of the joint appears suddenly, without any appreciable external cause. Neither fever nor pain attends. Swelling of the tissues neighboring the joint occurs to a very considerable degree. The hydrarthrosis may persist some time, but the general tumefaction disappears in a few days. In a week or two, sometimes sooner, more or less marked crepitus may be detected, revealing the already profound alteration of the articular surfaces of the bones. The hydrarthrosis being resolved, extreme mobility of the joint remains, giving rise, in some cases, to dislocations. He also observed in several cases a rapid wasting of the muscles about the affected joints. The disease, he

d'une Lésion du Cerveau ou de la Moëlle épinière. *Archiv. de Physiol.*, t. i. p. 396. Paris, 1868.

† Maladies du Système nerveux, de la Moëlle. Paris, 1879, p. 240.

‡ Amer. Jour. Med. Sci., 1831, p. 55, and 1833, p. 360.

§ Guy's Hospital Reports, third series, 1858, vol. iv. p. 206.

¶ London Lancet, 1846, vol. i. p. 278.

\*\* Gunshot and Other Injuries of Nerves. Philadelphia, 1864.

†† Paralysis of the Lower Extremities. Philadelphia, 1861.

‡‡ Medical Times and Gazette, 1868, vol. ii. pp. 498 and 556; and 1869, ii. 123, 272, 484. Gazette des Hôpitaux, 1869.

§§ Pamphlet, same year, Asselin, Paris.

|||| St. George's Hosp. Rep., vol. iv.

¶¶ London Lancet, 1874, vol. ii. p. 261.

\*\*\* Amer. Jour. Med. Sci., April, 1875, p. 339.

††† Loc. citat. sup.

†††† Leçons sur les Maladies du Système nerveux. Paris, 1872, 1873.

\* Op. cit.

† Sur quelques Arthropathies qui paraissent dépendre

continues, usually attacks the elbow-, shoulder-, knee- (especially), and hip-joints.

M. Vulpian\* says that even the smaller joints may be attacked.

Ball† claims that there are two forms, —the early and late.

M. Charcot‡ has, however, shown that this is only relatively true, since the so-called late form is seated in the upper extremities, and it is well known that the spinal lesion travels from below upward. The fact that this arthropathy appears in the upper extremities when there is no, or only slight, ataxia in those parts, would seem to support Charcot's view.

Charcot, Ball, and Bernutz§ have each seen a case wherein the liquid in the swollen joint was purulent; in all other cases it was serous. In cases wherein suppuration occurred fever was present. In M. Bourceret's case the temperature reached 107.24° F.

A special characteristic is absence of pain in spite of the large amount of swelling.

*Pathology.*—The peculiar anatomical feature of this disease is *rapid destruction of osseous tissues*. The articular extremities of bones are rapidly worn away. There is no effort towards reproduction of bone. In a few weeks or months a very large amount of osseous destruction may occur.

Regarding the nature of the affection, all authorities agree that it is due to a perturbation of the trophic influence of the nervous system. M. Charcot|| first thought that there was a special connection between the arthritic lesion and a degeneration of certain nerve-cells of the anterior cornua of the spinal cord, basing his deduction upon a few cases. Later¶ he saw his error, since in cases presenting otherwise similar features no changes in the anterior cornua could be detected.

*Other Forms.*—M. Charcot\*\* tells us that aside from the arthropathy just described, and which is peculiar to locomotor ataxia, we may see the ataxic patient attacked by nodose (deforming) rheumatism or by dry arthritis, each presenting their usual clinical features.

Finally, in reviewing Case VIII., we see that the plantar ulcers first arose be-

cause the tissues presided over by the trophic nervous system were, by reason of spinal changes, unable to resist normally the influence of mechanical violence produced by the patient's awkward movements in locomotion. The special arthropathy of the primary disease followed. The singular feature connected herewith was its late appearance,—namely, after extreme ataxia had existed for a long time. In this respect the case would seem to support M. Ball's classification.

*Treatment.*—A thoroughly practical question is, How shall perforating ulcer of the foot, with or without the special arthropathy of ataxia, be treated when occurring in a tabetic subject?

Basing my conclusion upon a review of Case VIII. and the pathology of the disease, I most unhesitatingly advise that when there is but limited disease of the bones no operative measures whatever should be resorted to. Detergent and protective applications should alone be employed. When the disease has progressed to a very considerable extent, amputation of the leg might be made, *provided* the patient's general condition would permit of such a capital operation with any hope of success. The exercise of great judgment would be required in deciding the case. Better err on the side of expectancy than perform an operation which, in the majority of cases, would reflect injuriously upon the operator, since, from the nature of the primary disease, but little recuperative power could be expected.

The treatment of ataxic arthropathy proper should be limited to keeping the parts at rest, to the employment of mild compression,—possibly, where the hydrarthrosis is great or is not speedily resolved, aspiration of the joint.

Resulting dislocations should be reduced, and the parts preserved in their normal relations by the simplest mechanical means.

For the benefit of those desiring to investigate these subjects more fully, I append a brief bibliography in addition to that already given.

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\* *Loc. cit.*, p. 333.

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#### A CASE OF OVARIOTOMY, WITH APPARENTLY DOUBLE OBLIQUE INGUINAL HERNIA AND TWO UNCERTAIN TUMORS OF THE LABIA MAJORA.

Read before the Philadelphia County Medical Society, December 21, 1882.

BY W. W. KEEN, M.D.

MRS. R.; American; æt. 52; passed the change of life æt. 46; five children, the last eighteen years ago. Fifteen years ago she had gradually developed double oblique inguinal hernia. Her recollection as to the history of these protrusions is not very clear. She has worn a double truss for years. In good health till last spring, when pain began in the back, and the abdomen began to swell. Dr. Isaac E. Roberts first saw her some two months ago, when her chief difficulty was flatulence and dyspnœa from the crowding of the abdominal contents upward. No history of any attacks of peritonitis. Her legs never swollen till a month ago, and then very slightly. Urine normal, but scanty; appetite poor; has lost flesh.

December 17, 1881, I saw her with Dr. Roberts, and found her a rather spare, thin woman, evidently in ill health. Chest and contents sound; abdomen distended; the abdominal veins rather more marked than usual. In the erect posture, above the level of the umbilicus, the abdomen was tympanitic; below it there was dullness and fluctuation. When the posture was changed, the fluid changed its place; but the right flank at no time lost its resonance. On palpation, but little could be learned, partly on account of her unwillingness to allow much pressure, partly on account of the fluid; but above the right iliac fossa, after passing through the layer of fluid, a small lump could be touched; and from its general resistance it was believed to be connected with an obscurely-felt much larger tumor in the central abdomen.

Each labium majus was distended—the right one the most—by an oblique inguinal hernia, with impulse on coughing. The contents could be reduced in part, but on the right side a curious tumor, feeling ex-

actly like a small testicle, was perceived. It had been there, she said, for years. It was not reducible; it gave no pain. On the left a smaller and softer similar lump was perceptible.

December 19.—Ether was given; and, after drawing off the water, she was tapped low down in the median line. A gallon of ordinary ascitic fluid was drawn off, the stream being often interrupted by the tumor's impinging against the end of the canula. The fluid being removed, the belly was then seen to lie on a large knobby tumor made up of lumps from the size of a large orange to a hazel-nut, some of the larger ones being evidently cysts. One of these was tapped by the aspirator, and  $\frac{1}{2}$  of a fluid resembling that of ascites was drawn off. The whole mass was rather larger than the double fist, and was movable at the lower belly. It extended, however, above the umbilicus, chiefly in the middle line, as an irregular mass, more firmly fixed and not nearly so prominent anteriorly. The uterus was two inches in its internal measurement, freely movable, and in its proper position.

*Diagnosis.*—A tumor, partly solid, partly cystic, probably cancerous, unconnected with the uterus, and either ovarian or arising from the lumbar glands or possibly the omentum.

*Treatment.*—An exploratory operation.

Both fluids, on boiling, coagulated completely. The microscopic examination of the cystic fluid showed a few blood-cells and oil-globules, with a very little unrecognizable debris, cellular and granular. No well-marked "ovarian cells" were found.

December 20.—Her condition was excellent this morning, the tapping having given her great relief; and the operation was decided on at once.

Ether was given, and the antiseptic method followed. The abdomen having been reached, the tumor was found to be a cystic and solid tumor of the right ovary. It had only one very slight adhesion posteriorly. In the right iliac fossa it was found that by the broad ligament it was connected to the sides of the pelvis; but the mass here was so totally friable that it broke down and loosened its hold with the greatest ease. A few points of similar soft adhesions existed anteriorly to the bladder. The pedicle was tied by silk (carbolyzed) and dropped into the abdomen. The left

ovary was beginning to be diseased, and was also removed in a similar manner. The upper, more fixed part of the tumor was now found to be in the lumbar glands, unconnected with the ovarian tumor, but doubtless the result of it. This was not touched, of course.

Examination of the two internal abdominal rings showed them both patulous, so that the finger could be thrust into them with ease. No intestine was in the canal at the time of the operation. The left labium contained a movable body, which was with ease protruded into the abdomen and removed by the fingers. As I did so, a teaspoonful or two of fluid escaped from around it. It had a few shreds of tissue looking like omentum (?) at the end next the ring. The tumor in the right labium I could push up to but not through the internal ring.

December 21.—She reacted fairly well, was quiet, without pain during the night, but slept very little; vomited considerably; temperature,  $101^{\circ}$ ; pulse, 140, and weak. The prognosis is of course fatal, and shortly so.

*NOTE.*—The later history may be briefly stated. Her temperature, after two days, fell to the normal. Though weak and suffering from a disturbed stomach, she was more comfortable after the operation than before it. On the fourth day I removed four of the seven sutures, and on the seventh day the remaining three, the wound having healed throughout by first intention, without suppuration. She failed rapidly after the tenth day, and died on the fourteenth. Dr. Roberts made the post-mortem, and a piece of the liver, the glandular tumor, and the body from the right labium majus were sent to the committee on microscopical examination.

*Post-mortem*, forty-four hours after death. —Union by first intention was found almost entirely; internal surface of the peritoneum free. Some ascites; some adhesions of the bowels in the right iliac fossa; none in the left. Bladder empty; its surface smooth and free from adhesions. Removed the tumor in the right labium majus, part of its contents oozing out. The upper tumor lay in front of the spine, extending from the diaphragm downward, as large as two fists, hard, nodular, not juicy on section. The pancreas was embedded in it. Liver with cancerous nodules.

WHAT IS THE BEST CURE IN  
HIP-JOINT DISEASE?

Read before the Philadelphia County Medical Society,  
December 28, 1881.

BY OSCAR H. ALLIS, M.D.,

Surgeon to the Presbyterian Hospital.

IT will prevent misapprehension and profitless discussion if I state clearly at the outset the position I intend to sustain.

I shall have no reference in the following remarks to the early manifestations of the disease and its possible cure. An eminent surgeon has said that "nine-tenths of the cases can be perfectly cured if taken in time." Granting this to be true, it is clinical experience that *nine-tenths* of the cases are *not* brought to us in the early stage; and the pertinence of my query still applies to the great majority of cases that fall victims to this painful, crippling disorder.

To make my position still clearer, I will include every grade of the disease under two heads. In the first or milder form the manifestations of the disease are not such as occasion alarm on the part of the patient or friends. Though a slight lameness is present, and the active sports, exercise, or avocation are precluded, yet the patient is not confined to his bed; and even if medical aid is sought, the disease may be so masked as to escape detection. Finally, after months, the patient seeming to get no better or worse, further medical advice is sought, when the hip presents every evidence of cure from hip-joint disease, but with *fixation of the joint*.

In the second or severer type I shall include all cases that come under our care with unmistakable evidence of high destructive inflammation. The disease requires the most judicious surgical care to arrest it. Slowly but steadily the symptoms subside, health returns, and every evidence of local disturbance disappears, when an examination of the joint shows *fixation*. Fixation I believe to be nature's best cure; and the single question I wish to bring before the Society at this time is, "*Can cases that have passed through the inflammatory stage of hip disease, in which the disease has been arrested and a cure established through fixation, be still further redeemed and a movable joint established?*"

I ask the question, for clinical teaching answers in the affirmative. I ask the question, for I have never heard in lectures or

seen in print a full, clear, and rational standard by which medical men should be guided in their *cures* of this disease. Over and over again I have witnessed in clinical teaching, and in the presence of hundreds, a hip in the stage here represented, moved under an anæsthetic, to break up adhesions and to prevent ankylosis. These cases may never be seen again by the student, and he leaves his *alma mater* with positive views of the proper practice in this stage of the disease. Should such a one light up the disease afresh, he may be led to conclude that it was due to his lack of skill; and such will find some comfort in the instances I shall briefly relate.

The first case of hip disease that was placed under my care occurred on my leaving the Philadelphia Hospital. It was in a lad about 12 years of age. The case had been of an aggravated character, and, if I mistake not, the actual cautery had been applied. At the time I took charge of him the extension apparatus was still employed. He was daily gaining, and every symptom of inflammation had disappeared. A few weeks later I removed the weights, and, cautiously examining the joint, found it fixed. This condition I reported to the surgeon who had put the case in my hands, stating "that the patient would recover, but with a stiff joint." His reply was, "*Not if you do your duty.*" Under his direction I administered an anæsthetic and carefully moved the joint. The result was that the disease returned in fourfold fury, and bore a widow's only son speedily to his grave.

A second case came under my care. In this, a lad of 5 years, the disease had been of a mild grade, and, although for four or five months under medical care, its true nature had not been observed. The case was really one of *nature's cures* with fixation. This was readily pointed out; but the distressed parents desired a better result, if such were possible. With the experience of the first case fully impressed upon my mind, I determined to associate with me a surgeon of experience and authority. The adductor tendons were cut and the limb moved. Giving it a few days' rest, it was again cautiously moved, until in a few weeks it seemed to move as easily as a normal joint. But, just as triumph seemed to be assured, *hectic*, nocturnal pains, and a pointing abscess stole in upon us and forbade further interference. By change

of air, the best of nursing, and a resort to the very means by which the disease is treated in its inflammatory stage, the case progressed favorably, until it finally recovered the condition in which I first found it.

The third case was that of a young man about 20 years of age. He, too, came under my care in the stage of fixation. For months the history had pointed to local hip-trouble, but now the symptoms of the disease and its stage were unmistakable. Thinking that in my other cases I had been too anxious to reclaim the function of the joint, and had therefore been too thorough in my manipulations, I determined in this case to be extremely cautious, to move it at greater intervals, and this would enable me to desist should untoward symptoms arise. I therefore gave an anæsthetic, and, flexing the femur once, and that, too, slowly and steadily, I as gently restored it to its place on the bed. A week later I repeated the motion, with the same precaution; but before the third week came round, the elevated temperature, disturbed rest, and loss of appetite told me I must desist. This I did; but the disease, re-established by the two gentle and cautious manipulations, culminated in destruction of the head of the femur, and, though resection took place a year later under most skilful hands, the patient succumbed.

Thus, of three cases,—the only ones in which I have tried to redeem the hip when nature had cured by fixation,—two resulted in death, and the third escaped, but not until he had been dragged to the verge of the grave by established surgical practice.

That which has been my experience has, I am quite sure, been the experience of others, and with Bryant, who states that the best cures for spinal disease are those that have never come under medical care, I say that, in my experience, the disease of the hip often runs to a most successful issue when let alone, and that interference with this result has done mischief, and only mischief.

Barwell, on Diseases of the Joints, says, under the head of "Hip-Joint Disease," "When inflammation has entirely subsided, and whether or not abscesses have formed, one of the most difficult questions to answer is the advisability or otherwise of passive movement as a prophylactic of ankylosis." The question, since it implies a grave doubt of its expediency, is

one of great significance when coming from one whose life-work has been upon the diseases of the joints. He suggests in cases of good constitution, and where the health is in a measure restored, encouragement of exercise in the form of gymnastics, by which the normal function of the joint may be regained. Yet even in this he enjoins great caution. Such advice seems hardly necessary. With returning health, the restless nature of the child will give ample use to all healthy joints; but the little one who has just escaped the agony of joint disease will not be likely to torture itself in its play.

In attempting to reclaim the function of the joint we lose sight of two important things,—first, the pathological condition of the joint; second, that if the object for which manipulation is undertaken be unsuccessful, the patient will be left in a far worse condition by the attempt.

As to the condition of the joint, it may be said that, in all the cases in which the inflammatory stage has run high and been lasting, the soft structures are so changed that there is no true synovial membrane and no true cartilage remaining. The cartilaginous joint-ends have no longer their normal individuality. The structures and conditions that made and kept them distinct are no longer present, and *articular* ankylosis is the inevitable result. There is no longer a joint-cavity and no longer toleration of motion. The success that is met in restoring a joint to usefulness in case of fractures finds no analogy in this class of ankyloses. In fracture the false ankylosis depends upon *peri-articular* inflammatory products, and even when in exceptional instances fibrous bands occur in crushed joints and are successfully overcome by motion, the intelligent examination of the subject will fail to find the slightest parallelism in the nature of the two subjects. In the arrest of the disease, in the cure by fixation, without abscess, necrosis, and distressing sinuses, the patient and physician have every reason for congratulation. The cure is indeed a most favorable compromise on the part of the disease; it shortens the confinement of the patient; while in all cases where the bone becomes seriously involved, some lead to an early grave, some to spontaneous cure after years of torturing and disgusting disease, while still others are relieved only by surgical interference.



Instead, then, of holding out to patients and their friends that a cure with a stiff joint will be a great misfortune, it should be rather regarded as the most fortunate termination possible; and great care should be taken when permitting the patient to leave his bed to see that a well-adjusted apparatus will secure a continuance of the means of rest that have led to so fortunate a result.

The cure by fixation includes, however, a still further question,—viz.: what relation shall the femur have to the trunk to yield the greatest advantages? When in exceptional cases the limb is *fixed* at a right angle to the trunk, we are apt to regard the subject with great commiseration; yet such a position is the most advantageous, under the circumstances, for a sedentary occupation. Such a one can sit with as great ease as with healthy joints. It is only when he walks that his misfortune is so apparent. The case cured with femur in direct line with the trunk has similar advantages when the occupation is mainly on the feet. Such cases receive but little sympathy when compared with the former class, yet the latter are doomed to a most unrestful posture when they desire to sit down. Such can only use the edge of a chair, and often find sitting more tiresome than standing. While, therefore, fixation in any position will be a great inconvenience in any walk in life, yet the position midway between those just described will probably, in the majority of cases, yield the greatest advantages.

Still another point in nature's cures is worthy of attention. With loss of function must be associated arrest of development. The limb, in common parlance, shortens, and thus by degrees necessitates a high shoe. The disparity in the limbs is due to the unequal lengths of the femur. By this arrest in the growth the knee is made to approximate the trunk, and the ankle, by the elevation of the shoe, approximates the position of the knee. Thus the shortening of the limb, which necessitates a high shoe, becomes a great advantage, since by such a result greater activity is rendered possible.

PHILADELPHIA, 1604 SPRUCE STREET.

THE SECOND VOLUME of Prof. Geo. V. Ellis and Mr. G. H. Ford's "Illustrations of Dissections" constitutes the current number of Wood's Library of Standard Authors.

## A CASE OF FUNGOSITIES OF THE BLADDER CURED BY SCRAPING WITH THE FINGER:

WITH SOME REFERENCES TO THE LITERATURE OF THIS AFFECTION.

Read before the College of Physicians of Philadelphia,  
March 1, 1882,

BY WALTER F. ATLEE, A.M., M.D.

THIS case is reported because it is a rare one, because it is instructive in a practical point of view, and because consultation with most of his works of reference would not assist the surgeon in benefiting a similar case as much as can be done by doing as was done here.

Miss S. B. consulted me in the summer of 1880, on account of painful and frequent micturition, with hæmaturia. She was born in April, 1861. Her father is a large, strong, and healthy man; her mother died when she was a child, after having suffered from many manifestations of scrofula.

She said she remembered to have felt occasionally a slight pain in passing urine from her earliest recollection. When 17 years of age she first suffered severely. Her urine then was very light in color, with no sediment, but with a strong odor. The pain was while passing the urine and after it had passed. After the emptying of the bladder there was a constant desire to pass something more. She became thin, pale, and haggard. When 18 years of age, some pus appeared in the urine, and occasionally a little blood. These symptoms increased to such an extent that she was obliged to keep her bed for several months. This rest, aided perhaps by medical treatment,—for she had always enjoyed the care and attention of our most experienced physicians and nurses,—made some improvement in her condition, so that she was able again to go out. All the worst symptoms, however, soon returned; and when I saw her in September, 1880, her state was a very serious one. There was constant inclination to empty the bladder, which could not be resisted oftentimes for more than a half-hour, and the loss of blood was considerable.

The urine, when examined at this time, showed pyoid bodies, epithelium from the bladder, and crystals of triple phosphate, together with blood-corpuscles in abundance. The blood was of a bright-red color, showing that the urine had not had time to produce those changes in color always produced by long contact with the hæmoglobin of the corpuscles.

With such symptoms, this case seemed clearly to be one of foreign body in the bladder, and the advice given was to attempt its removal without delay. For this purpose the patient was put under the influence of anæsthetics, and the urethra was dilated by means

of a pair of ordinary dressing-forceps, introduced, opened, and withdrawn as often as necessary,—this being, in my experience, the best way of effecting this dilatation.

When the finger was then passed into the bladder, nothing abnormal was felt,—no calculus nor distinct tumors,—except that about the fundus were a number of fungosities or soft growths, some of them more than a half-inch in length and about one line in thickness. These were carefully scraped off by the end of the finger and by the finger-nail. This simple operation resulted in the perfect cure of my patient, and until the present time there has been no symptom of a return of her disease.

I call the growths thus removed fungosities, and not villous growths, inasmuch as they were not like tufts of fine hair (*villi*), but resembled rather *fungi* or certain mosses. I have several times seen similar growths removed from the cavity of the uterus in cases where for years they had been the cause of alarming hemorrhage. They have, anatomically, the same fundamental structure as the mucous membrane whence they spring; they are simple excrescences of this membrane; they are formed of granular amorphous matter, of cellular tissue in small quantity, and of fibro-plastic elements; almost all have a large number of capillary vessels ramifying through them, and some are covered by epithelium. This epithelium is *on* the surface, *homologous*, and not *within* the subjacent connective tissue, *heterologous*, which is characteristic of epitheliomatous growths.

I said that one reason for reporting this case to the College was that consultation with most of his works of reference would not enable the surgeon to benefit his patient as much as was done in this case. In Holmes's "System of Surgery" it is said, "The indications are to allay pain, to subdue spasmodic action of the bladder, to prevent hemorrhage by internal remedies, and to counteract its effects on the system by chalybeates and nutritious diet. Astringent injections very carefully introduced into the bladder, such as weak solutions of acetate of lead or of nitrate of silver, may be tried. They are, however, not to be repeated more than once or twice, unless marked benefit is observed and signs of vesical irritation have not been produced by their employment."

This is the advice given in almost all surgical works, not only general but special. Even in Coulson's excellent work on "Diseases of the Bladder and Prostate

Gland," of which a sixth edition was published in 1881, we find nothing but a similar plan of treatment recommended. Though quite out of place, I will cite here the diagnostic symptoms given in Coulson's work between villous growths and calculus, as being the best and clearest I have ever met with. In all works the diagnosis of these growths is said to be extremely difficult. For example, in the "Dictionnaire de Médecine" it is said, "Fungus of the bladder may be suspected, but a precise diagnosis cannot be established." (Tome xxx. p. 744.) "The pain in calculus is most severe after the urine has been passed, but in villous tumors the discomfort is aggravated by fulness of the bladder and relieved by its evacuation. The pain in calculus is relieved by rest, which has little or no effect upon the symptoms of tumors of the bladder. The hemorrhage also in the latter affection is neither decidedly aggravated by movement nor relieved by rest. In villous growths the blood is generally pure; in hæmaturia due to calculus there is generally more or less pus mixed with the blood. Examination by the rectum or with a sound in the bladder causes pain in cases of villous growth and increases the hæmaturia, whereas the symptoms of calculus are not necessarily aggravated by these manipulations."

To return to treatment: Nélaton says, "In women it is sometimes possible to reach the fungus by dilating the urethra and the neck of the bladder. The case of Warner tying a polypus of the bladder in this way is recorded above; and in case of a fungous growth an analogous operation should be done."\*

In Warner's case, above referred to, a polypus penetrated into the urethra of a young woman, and pushed out of the meatus. An incision was made, dividing the half of the urethra; the rest was dilated, and also the neck of the bladder; the tumor was drawn out and a ligature applied to the pedicle.

In the "Principles and Practice of Surgery" of Prof. Agnew, and in the third edition of Prof. Gross's treatise on "Diseases of the Urinary Bladder," revised by Dr. Samuel W. Gross, we are advised, when symptoms of papillary and polypoid fibromas are seen in women, to dilate the urethra by special instruments, and remove

\* Pathologie Chirurgicale, tome v. p. 301.

them as may be found best under the circumstances of the case. Some eighteen cases altogether are recorded in these works where vesical growths were removed by various operations. Of the prognosis in such cases, Dr. Gross forcibly and truly says, "It is of the worst possible description. Death almost invariably follows from sheer loss of blood or the combined effects of hemorrhage and pain." Of the treatment he says, "Surgical interference is demanded imperatively, since without it a fatal issue is almost the inevitable result."

The best account I have met with of the flocculent excrescences or fungosities in the bladder is contained in the "Lectures on the Surgical Disorders of the Urinary Organs," by Reginald Harrison, second edition, London and Liverpool, 1880. Mr. Harrison refers to the paper of Robert S. Hudson in the *Dublin Journal of the Medical Sciences* for June, 1879, to that of Prof. G. Murray Humphrey in the "Medico-Chirurgical Transactions" for 1879,—which contains probably the best account to be found of the pathology of growths into the bladder,—to Mr. Norton's cases in vol. xii. of the "Clinical Society's Transactions," and to a paper of J. H. Roberts and C. De Morgan in vol. xxi. of the "Transactions of the Pathological Society," where the microscopical appearances are very beautifully represented. He also relates a case (p. 359) communicated to him by a Dr. Alexander, where chloroform was given and the urethra dilated; a wire écraseur was passed, and a large growth was removed; smaller growths were removed by the finger. Fifteen months afterwards it was necessary to remove some more by the finger, after which the patient remained well.

This case of Dr. Alexander is doubtless the same as that related in great detail in the *London Lancet* for August 17, 1878. The writer says he cannot find any other case recorded of removal of a villous growth from the female bladder, and quotes from Bryant's Surgery "that there is no cure for this affection; the surgeon can only relieve symptoms. The disease usually destroys life in about two years."

Enough has been said to show that cases such as I here report are rare, that they cause great suffering and, eventually, loss of life, that the means usually recommended fail in giving relief, and that an operation, easily performed, attended by no risk, and

followed by no bad consequences, does cure such cases, and that this operation appears to be very generally unknown.

One more observation may be permitted, indeed, seems called for, in this rather desultory paper: this is, that the history of a case such as is here related justifies us in looking favorably upon the resort to a similar proceeding in cases of similar disease in the male patient. An incision into the neck of the bladder, when so much suffering and so great danger to life are present, is surely justifiable. It is a matter of no great difficulty or danger. Even if it were found after the making of this opening that the diseased tissues could not be taken away, the patient would in all likelihood obtain some relief from the free passage afforded to the purulent and bloody discharges. There is a case recorded\* where Billroth did this; and, encountering a fibrous tumor, the size of which was such that it could not be extracted through the perineum, he cut through the recti muscles above the pubic bone, made a transverse incision into the bladder, and then tore through the tumor near its base with the finger, and dissected out the pedicle. The patient was perfectly cured.

## NOTES OF HOSPITAL PRACTICE.

### PENNSYLVANIA HOSPITAL.

SERVICE OF DR. JAMES H. HUTCHINSON.

Reported by GEORGE F. SOUWERS, M.D.

#### SCIA TICA.

GENTLEMEN,—I have to present to you this morning the case of A. G., single and a domestic, admitted to the house October 31, 1881. Her mother died of cancer, and her father of phthisis. She herself has had scarlet fever and smallpox: these, while she has never been strong, have left no traces of their presence. Two years ago she contracted malaria, this exhibiting itself in a decided attack of chills and fever. Last August, after having sat on a cold marble step, she suffered from severe pain in the back, which, after lasting and varying in severity for the space of three weeks, passed into the right leg, in which limb the pain gave rise to so much distress as seriously to interfere with her walking. Her general health was other-

\* See British Medical Journal, vol. ii., 1875, p. 493.

wise good. Upon examining the heart and lungs when I first saw her, I found the signs all negative. The pain, we find, shoots along the course of the right sciatic nerve; she walks lame, and the skin is tender on pressure slightly made. Now, there may be in these cases of sciatica, especially if the case be what we may style indistinctly marked, some little difficulty in arriving at a satisfactory diagnosis. In the first place, we may be disposed to view a case as one of gluteal rheumatism when, as in this instance, these muscles are primarily and seemingly most involved, and when the pain commences, as it did here, as a sharp, shooting, rheumatic pain, and then degenerates into a mere soreness, more or less localized; but this error may be easily avoided in one way. Notice how your patients trace out for you the course and direction of the painful sensations: they will, as does the woman before you, unerringly trace out the course of the sciatic nerve, and insist that in a certain line is always the seat of pain. When such a history is presented for your consideration, you may rest assured that there is disease or 'neuralgia' of the sciatic nerve. While this patient presented this condition of pain along the upper course of the sciatic nerve, together with tenderness of the skin, she was also found to present certain hyperæsthetic spots, localized over the points of emergence of branches of the sciatic, at the head of the fibula, and over the malleoli. These symptoms may be said to be pathognomonic of sciatica, and are apt to be associated, as is here shown, with convulsive twitchings of the muscles of the leg. In addition to these symptoms, we find that she complains of uncertainty in walking: this is due to loss of the sense of touch, or anæsthesia of the foot, which renders her unable to feel distinctly the floor or ground.

Analgesia, as well as anæsthesia, may be present in these cases. Indeed, in some cases in which the patient complains most bitterly of sharp shooting pains in the leg or foot, he will manifest no signs of pain when a pin is thrust into these parts. In these cases the first cause of the trouble—the exciting cause, as we say—is nearly if not quite always cold, applied commonly locally, as by resting on damp ground, stone steps, etc., the first effect generally being the production of a muscular rheumatism. Shortly afterwards we find that the

skin in spots over the sciatic is giving evidence of an hyperæsthetic condition, this symptom being shortly followed by the well-defined course of pain in the sciatic nerve, anæsthesia, analgesia, muscular twitching, and loss of muscular power, which in reality is apparent only, and not real, being due solely to the great pain experienced by the patient in locomotion. If, however, the disease last for some time, without the patient obtaining adequate relief, a real loss of power follows, this being in accordance with the well-known law of nature that the function of a part not used gradually undergoes retrogressive action: consequently, care must always be taken to watch narrowly the development of such an unfortunate termination. Now, in addition to cold as a producing agency in sciatica, there is another factor that may occasionally be the starting-point of the diseased action. We find here a woman who, having lived in a malarial section of the country for a season, contracted chills and fever. Following upon the development of this malarial outbreak, which was characterized also by frontal or orbital headache, which hemicrania in such cases is named brow ague, we find an attack of sciatica making its appearance. There can be no doubt that malaria pure and simple may in a given number of instances produce inflammatory actions in the sciatic nerve and its sheath, the poison exploding in its virulence upon these structures in preference to its more common seat in the frontal and orbital region. Either one of these neuralgias will get well, and get well comparatively rapidly, upon the almost specific treatment of malarial troubles,—namely, quinine. But in this case quinine alone did not seem to answer the purpose completely. While there was some slight improvement, it was not such a gratifying result of treatment as would be produced if malaria alone were being dealt with. Under such circumstances we are justified in supposing that the disease, having failed to respond to the therapeutic test for the presence of malaria, did not owe its origin to that cause, but that some other agent must be sought for to explain the production of the symptoms present. Now, the other most common cause of sciatica is the presence of the rheumatic poison, which may seize upon the nerve-sheath, which, swelling and giving rise to exudations, etc., produces pressure upon the nerve, thus



giving rise to pain in the body of the nerve, while at the same time permitting of the production of anæsthetic and analgesic effects. The question of treatment where rheumatism is supposed to be the exciting cause presents a different phase from what it does when malaria is the poison to be dealt with.

Iodide of potassium in such cases is beyond doubt one of the best agents we possess to influence the systemic poisoning, used either alone or coupled with the salicylates; the iodide must be given in decided doses, and pushed till good results are obtained,—that is, provided the stomach does not rebel, nor the system show saturation by means of the iodide eruption. Along the course of the nerve blisters can be employed very advantageously. Of course, when the pain is intense, we may have to resort to hypodermic medication; but we are considering to-day the systemic treatment more especially. In all these cases, however, there at length comes a time when internal medication seems to cease to be of any avail: we must then resort to other means of influencing the diseased action, which, having reached a certain point, seems to come to a stand-still. It is at this time that electricity, in the form of the continuous current, comes into play. Although I have not the same confidence in this agent as many other physicians have, still, in some cases I have known it to be of service, and, consequently, resort to it when other means fail. Where the system is more or less depressed, it must be built up by tonics, etc. In the case we are considering, in addition to the iodide the patient had administered to her six grains of quinine in the twenty-four hours, purely for its tonic effect. Under the treatment I have described, she has progressively improved, and I trust will be restored to a fair degree of health.

#### ACUTE RHEUMATISM.

The next patient is suffering from an entirely different kind of pain, and from a disease which, while it is perhaps at the root of a majority of the cases such as the one we have just closed the consideration of, yet manifests itself in its purity of type in the manner we see before us,—that is, as a purely inflammatory trouble involving the joints, and more particularly the larger joints of the economy, the diseased action being due to certain morbid changes in

the circulating medium on account of the presence of new materials, due, it is supposed, to malassimilation, which manifests itself by the presence and rapid development of lactic acid in the blood. This diseased action is known under the generic term of rheumatism, under which head are included the different varieties of the disease,—acute, subacute, chronic, and, by some, rheumatic gout. The case before us is a well-marked manifestation of that form known as acute rheumatism, which is characterized by the phenomena presented by the ankle we here see. The joint is hot and swollen; associated with which conditions there exists a certain amount of redness on the outer and inner sides of the ankle, though this latter condition is not so well marked as in the earlier stage of the disease, the case having progressed now somewhat towards recovery. The patient's history would seem to point to a good family record, and her own health has always been reasonably good, there being no specific disease, and no previous attack of the present trouble, which made its appearance after an exposure to wet and cold two weeks ago. Thus far, in this case there has been but one joint involved; but the tendency of the disease is to the involvement of a number of other joints soon after the onset of the disease: fortunately, however, the right ankle thus far has borne the brunt of the disease. It is not alone, however, the joints which are affected in rheumatism. In fact, were they the only parts affected by the disease, we should not have so much dread of it, nor such a long array of patients who have fallen a prey to its ravages. It would seem to have a peculiar predilection for attacking the valves of the heart and the pericardial sac, and is often in this the source of a good deal of suffering to the patient. Indeed, it is not infrequently the cause of his death. The longer the disease continues in its acute form, and the younger the patient, the greater seems to be the danger of this serious complication taking place. The unfortunate fact also exists that it is not in those cases alone in which the external lesions are most marked that the heart is implicated, but in the seemingly mildest cases the heart-lesion may also occur: it is hence not an uncommon observation that those in whom cardiac lesions are found have never been the subjects of a severe rheumatic attack.

In this case there is a slight blowing murmur. Now, does this necessarily indicate a serious lesion? Most certainly not; for it may simply point to a swelling, greater or less in amount, of the heart-valves. This murmur is heard in the neighborhood of the mitral valves, but does not seem to be due to any serious implication of the valves at this point. In addition, there is a murmur heard at the base of the heart and to the left of the sternum and occurring with the systole, but it also is not a sign, in this case, of serious import, and is simply due to anæmia. This murmur was frequently heard in former times, when it was more common than it is now to employ remedies which have a tendency to produce an anæmic condition of the blood. This condition when I first came on duty in this hospital, a number of years ago, was of no uncommon occurrence. At that time we employed the alkaline method of treatment almost exclusively, which, I may here say, gave usually excellent results, but unfortunately, it at times produced the most profound anæmia. If this case were in its early stage, where high fever and great swelling, etc., are present, I should have administered to her ten grains of salicylic acid every hour till one drachm had been taken, or twenty grains of the salicylate of soda every three hours; although it must be remembered that when thus administered it is apt to give rise to vertigo and soreness of throat. It is not of much use, however, to administer it late in a case where anæmia has set in as a complication: large doses of the tincture of the chloride of iron, as proposed by Reynolds, answer a better purpose.

If the disease were in the acute stage here, I would direct that the ankle of this patient be wrapped in raw cotton, or in a solution of the carbonate of potassa, either one of these agents affording great relief. Where the disease has a tendency to lapse into a subacute form, the inflammation retrograding to a certain point and then remaining stationary, small blisters about two inches square applied over the inflamed joint are sometimes of benefit. These blisters have been recommended in the acute stage of rheumatism; but in that stage the propriety of their use is questionable, and I am indisposed to employ them unless there is a tendency for tenderness to linger in the joint.

## TRANSLATIONS.

### DIAGNOSIS OF CEREBRAL CONTUSION.—

In a clinical lecture in *Le Progrès Médical* (No. 6), M. Duplay distinguishes between the signs of commotion of the cerebral substance from an injury and those properly belonging to contusion of the brain, which are generally confounded or grouped together. He concludes that in some cases we may suspect contusion in an individual who, at the same time with the symptoms of commotion, presents convulsions, contractures,—say of the muscles of the face,—or paralysis of one side of the body or of certain muscular groups; but in the majority of cases, and for a certain length of time, in order to affirm the existence of a contusion, it will be necessary to await the onset of symptoms of inflammation.

The signs that have hitherto been given as belonging to contusion of the brain by all writers upon the subject are mainly those arising from commotion of the brain. Contractures of muscles which are more or less general,—i.e., not definitely localized so as to correspond with lesions of the well-known cortical centres,—however, are probably due to irritation of the nerves of the dura mater,—a condition also capable of explaining certain vascular reflexes, such as spasms or congestive paralyses of the vessels of the cerebral hemispheres or of the optic globes. This point should be borne in mind in the diagnosis from the ophthalmoscopic appearances of the retina, in order not to attribute to cerebral disease what in reality is due to congestion or inflammation of the meninges.

STRAMONIUM-POISONING.—A six-year-old child, having eaten some of the leaves of the thorn-apple (Jamestown-weed), was brought into the house in a condition resembling intoxication. Dr. Rubio found him stupid, crying out with expressions of fright, as if in a nightmare,—having illusions of dogs and snakes being after him,—disturbing him at times from a deep lethargy. After a short rest he threw up his arm and laughed, as if playing with his companions, and finally sank into a deep sleep, which continued, in spite of all efforts to rouse him, for eight hours. When he awoke he was better, and convalescence rapidly supervened. The morbid appearances observed were: primarily the skin was somewhat reddened; temperature, 37.8° (C.); face strongly drawn, at first with

painful and afterwards stupid expression; pupils enormously dilated; constriction of the pharynx; dry tongue; pulse 95, hard, full, and frequent; respiration superficial and rapid; finally, involuntary micturition. In the second period, skin was pale; temperature  $36.2^{\circ}$ ; pulse 45, compressible; heart-sounds dull; stertorous respiration (45 in the minute). The attendant excluded belladonna-poisoning, partly on account of the rarity of the presence of belladonna in the neighborhood, partly on account of the transitory character of the redness of the skin, and the rapid appearance of pallor. The treatment consisted in irritation of the uvula, which produced vomiting, the use of stimulating enemata, and the administration of laudanum, and, later, of coffee and glycerin emulsion.

Upon this observation Rubio bases the conclusion that stramonium is at first a temporary stimulant, but secondly, and for a longer time, it acts as a paralyzing agent.—(*El Siglo Med. and Deutsche Med. Zeitung*, February 23, 1882.)

**BAPTISTE-JACOB, THE NEW SIAMESE TWINS.**—The brothers Tocci, born in Turin in 1877, are considered to be even more curious than the famous Siamese twins. They have two well-formed heads, two pairs of arms, and two thoraces, with all the internal organs; but at the level of the sixth rib they coalesce into one body. They have only one abdomen, one umbilicus, one anus, one right and one left leg. Their genital organs consist of a penis and scrotum, and at the back there is a rudimentary male genital organ, from which urine sometimes escapes. It is a curious fact that the right leg moves only under the control of the right twin (named Baptiste), whilst the other leg is movable only by the left twin (named Jacob). As a result, they are unable to walk. This left foot is deformed, and is an example of talipes equinus. Each infant has a distinct moral personality: one cries while the other is laughing; one is awake while the other sleeps. When one is sitting up, the other is in a position almost horizontal.—*Presse Medicale Belge*.

**TOPICAL APPLICATIONS OF ALCOHOL.**—In *La France Médicale* (No. 28) M. G. Ollive speaks very highly of alcohol in acute inflammations of cellular tissue and of serous membranes, and especially in peritonitis. Alcohol, as pure as possible

and concentrated ( $80^{\circ}$  or  $90^{\circ}$ ), is to be applied upon compresses of cotton wadding, or tarlatan, folded several times and made to fit the surface: these are wetted and reapplied every three or four hours. Two cases are reported—one of pelvi-peritonitis, the other of phlegmonous inflammation of the neck—in which this dressing not only relieved pain, but also retarded the development of the disease and hastened recovery. From an extended experience of other cases during several years, among which are those of phlebitis, lymphangitis, and acute hygroma, the writer is disposed to value alcohol very highly as a topical application. The discussion of its mode of action he reserves for a future time.

**PERMANGANATE OF POTASSIUM AS AN ANTIDOTE TO SERPENT-VENOM.**—A recent communication to the Académie des Sciences, Paris, by M. de Quatrefages, calls attention to the value of the discovery of M. de Lacerda, of Brazil, that the hypodermic injection of permanganate-of-potassium solution is an antidote for snake-bite. The remarkable results already reported have now been confirmed by other observers in Brazil, and by Dr. Courty, of Paris. M. de Lacerda insists upon the importance of the extemporaneous preparation of the solution, and advises the preparation of small packages (1 gramme) of the salt and a bottle containing 10 grammes of water, thus making a one-per-cent. solution. The injection is made, after the limb is surrounded with a ligature, with the Pravaz syringe ( $\text{m}^{\text{L}} \text{ xv}$ ), into each wound made by the teeth of the reptile; and if the limb is already swollen, other injections are practised in the margin of the tumefaction, or, it may be, thrown directly into a vein.

**SYMPTOMS OF TRICHINOSIS.**—Prof. Germain Sée (*La France Médicale*, No. 14), in a clinical lecture on the recognition of trichinosis, lays especial stress upon muscular pains, with prostration, and swelling of the face. He says that these are constant even where gastro-intestinal symptoms are wanting.

**AN IMPROVED URETHROTOME.**—Dr. Jardin, in an article upon urethral stricture (*La France Médicale*, No. 17), describes and figures a new instrument, a flexible-stem urethrotome, which appears to have especial advantages in appropriate cases described in the paper referred to.

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PHILADELPHIA  
MEDICAL TIMES.

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PHILADELPHIA, APRIL 8, 1882.

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EDITORIAL.

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A NURSE REGISTRATION BUREAU  
IN PHILADELPHIA.

THANKS to the labors of our excellent training-schools, there are a number of skilled nurses engaged in pursuing their avocation in this city; not by any means so many as there should be, but, as the demand for them becomes more imperative, it is evident that their ranks will grow larger. In addition to these, there are others less qualified, but who have acquired sufficient ability to receive the endorsement of physicians. There are others, we regret to say, that are less deserving, and not a few positively unworthy of confidence. The difficulty of obtaining a competent nurse in a case of emergency, or even under ordinary circumstances, has been experienced by almost every practising physician; and even if a reputed nurse be engaged, after much skirmishing, it sometimes becomes a matter of regret that some means had not existed that would have enabled the physician to acquaint himself previously with the qualifications, and the family to learn something of the antecedents, of the comparative stranger.

It has been acknowledged for some time that there is an obvious want of some central authority here, as indeed in other large cities, that would provide nurses on demand, keep a record of their qualifications, engagements, and, to a certain extent, of their conduct,—perhaps with physicians' comments upon their abilities and behavior.

The conviction that such an institution with us is not only desirable but attainable has been greatly strengthened by the successful working of a nurses' registry in

Boston, which has now been in operation for two years, and has proved a great convenience to the nurses as well as to physicians and patients.

With this example in mind, Dr. S. Weir Mitchell at a recent meeting (in January) of the College of Physicians offered a resolution that a committee be appointed to consider the feasibility of the plan of carrying on a similar organization in Philadelphia. The committee subsequently reported in favor of the scheme, and detailed a plan which would enable it to be carried on under the authority of the College, which was adopted. The committee appointed to take charge of the Nurse Registration Bureau consists of Drs. W. W. Keen, S. Weir Mitchell, and Albert H. Smith, from whose earnest and energetic management good results may be reasonably expected.

Some alterations will be required at the College building in order to accommodate the new bureau, which, therefore, will not commence operations until about the 1st of May. Miss Emily Thomas, now an assistant librarian to the College, has been appointed secretary of the organization, and will reside upon the premises. The register will be accessible at any time upon the payment of a moderate fee, which will be smaller during the day than at night. It is proposed to keep a full record of qualified nurses and of their engagements, so that it can be at once ascertained whether certain ones are occupied or not, and also what nurses are disengaged at any time. The fact that confidential communications may be made regarding the conduct of nurses will exert an excellent influence upon some who are now without much restraint.

Among the changes that will be required in connection with this, are the introduction of a telephone, the attendance of a College porter or messenger, the establishment of an office, possibly of a conversation- and smoking-room for the Fellows,



and other needed improvements. It is believed that the increased activity at the College will warrant opening the library regularly during the evenings. There are also signs of promise of increased usefulness of the Mütter Museum, whose riches are known at present to but very few even of the Fellows of the College. The Nurse Registration Bureau is in the line of the movement of reform that has been quietly gaining strength during the last few years. Whatever may be its advantages to the public and to the profession,—and much has been anticipated in this direction,—it certainly will react to the welfare of the College of Physicians. It was announced at the last meeting that subscriptions had been received from friends of the movement sufficient to meet all its expenses for the first year. With such prospects, and under such able and energetic management, the success of the registry may be regarded as already secured.

#### COMMENCEMENT EXERCISES.

**I**N all educational institutions the supreme day of each recurring year is that on which its highest honors are conferred upon its students in testimony of ability, industry, and faithful performance of duty. Regarding the appropriate ceremonies that shall fully celebrate the importance of the occasion and best express the feelings of the neophyte and his friends of both sexes, there is much that might properly be said in favor of making the occasion a memorable one, and hence as unlike ordinary days as possible. In university towns the morning of the commencement ushers in a gala-day, and the student is the lion of the hour and the centre of crowds of admiring visitors. In cities of large size the graduate is of relatively less importance, though perhaps not in his own estimation. It is very evident, however, that exercises which may very properly characterize the great occasion under a certain set of circumstances

will bear considerable modification under others; and in the progress of time a feature of the entertainment that would only be pleasant and agreeable at first might develop into a nuisance that would become intolerable. This has, we believe, taken place in one particular that has so long been a part of the programme of the medical college commencements in this city. When classes were small, a few flowers upon the platform added to the æsthetic delights of the occasion, although considerably more appropriate at the commencement of the Women's College than of the sterner sex. At all times the ubiquitous lily projecting from the apex of a cone of wired blossoms is more suggestive of callow youth than of sober manhood. When the classes grew larger, the bunches of flowers grew more numerous and developed into crosses and other complicated, expensive, and inconvenient designs. Baskets of fruit, some real, some in wax, made their appearance, and then packages in abundance, supposed to contain books and instruments, came in swarms and covered every available place on the stage, and consumed valuable time in their delivery. It was observed that many of the packages contained the stamp of well-known dry-goods houses: evidently articles of wearing-apparel were now added to the list. Not only this, but it has been more than hinted that students, seeing the opportunity for a practical joke, have prepared parcels resembling jewelry, etc., for their graduating friends, but which in reality contained anatomical specimens from the dissecting-room and other choice mementoes of student-life, of more or less value,—generally less,—but which were duly delivered with the others.

Apart from the obvious partiality shown in the flowers and parcels delivery,—the best student by no means receiving the greatest number of floral offerings,—the whole thing is inconvenient, absurd, and out of place; and what was at first a pleas-

ant custom has now grown into an abuse. Considerations of this character led the graduating class at the last commencement of the University of Pennsylvania to discard entirely flowers and gifts other than prizes,—a wise and considerate action, which deserves to be copied. At another commencement recently held in this city, the flowery nuisance and package-party feature occupied its customary prominent place, and the students retired loaded down with their blushing honors, their sunflowers and lilies, their Bibles and visiting-lists, their packages of forceps, neckties, and amputated fingers, as usual. The faculty, students, and audience would be well pleased were this custom obsolete.

#### THE RESIGNATION OF PROFESSOR GROSS.

ON March 28, the resignation of Prof. Gross from the faculty of Jefferson Medical College, in which he has occupied the chair of the Institutes and Practice of Surgery for the last thirty-four years, was placed in the hands of the President of the Board of Trustees, Dr. E. B. Gardette, with the intimation that the action had been well considered and was final. The Trustees, at their meeting on the following day, passed resolutions accepting the resignation and unanimously electing the distinguished surgeon Emeritus Professor of Surgery. Acknowledging the inherent difficulty of selecting a fitting successor to Prof. Gross, the Trustees cut the Gordian knot by dividing the duties of the chair between two prominent surgeons that have long been connected with the college, as lecturers and colleagues on the Hospital Staff. Dr. Samuel W. Gross was elected Professor of Principles of Surgery and Clinical Surgery, and Dr. John H. Brinton, Professor of Practical Surgery and of Clinical Surgery. It is believed that the new professors, whose appointment creates general satisfaction,

will divide the duties of the clinic between them.

WE would call attention to the letter, which we print in another column, from Dr. Brush, detailing the recent attempt to assassinate Dr. Gray, of the Utica Asylum. It is, at present writing, altogether probable that the assailant was insane. The escape of Dr. Gray was a very fortunate one, and has called forth much congratulation and sympathy from his numerous friends.

WE are very glad to notice a second edition of Prof. Palmer's "Homœopathy: What is it?" published by Mr. George S. Davis, of Detroit, Mich. We know of no book more worthy of circulation as a tract by the profession.

#### CORRESPONDENCE.

##### LONDON LETTER.

IN my letter which appeared on the 11th of February last, some account was given of a case of aneurismal dilatation of the aorta. Under the plan of a spare dietary and sulphate of soda, with a little iodide of potassium, the case did well, and there was much return to the normal shape and size of the aorta by the recovery of the arterial wall in virtue of its own elasticity when the internal distending force had been reduced by the treatment. This is so important a matter in the treatment of aneurismal swellings that I wish to say a little more about the case. It was stated before that the observations of the late Prof. Parkes showed that the presence of albuminoid matter in the blood raises the blood-pressure,—an observation quite in accordance with what has been noted by others. Not only this, but he demonstrated that a non-nitrogenized dietary positively led to a diminution of the blood-pressure. Now, this is very instructive when placed side by side with the usual history of aneurisms. Aneurism, apoplexy, and angina pectoris are diseases of middle age and advanced life,—conditions commonly found with an hypertrophied left ventricle and hard arteries, the associations of high-blood pressure within the arteries. Such being the facts, it is clear that the plan of treating aneurism, linked

with the names of Albertini and Valsalva, has much to recommend it beyond the mere reduction of the blood-stream within the aneurismal sac and the deposit of layers of fibrin upon the aneurismal wall. No doubt this end was frequently attained, and the sac passed from a pulsating fluid tumor to a firm, hard ball of fibrin, and then the aneurism was "cured." Such end was all the more likely to be attained when the aneurism was due to an atheromatous patch on the tunica intima giving way, and the outer coats yielding, giving rise to a globular sac. But the cure of fusiform aneurisms and aneurismal dilatations by the deposit of layers of fibrin on the arterial wall seems somewhat problematical, though this is quite feasible and intelligible in globular aneurisms with a restricted orifice. In cases where the arterial wall has yielded to an internal distending force acting mainly upon the outside of curves, as the convex surface of the aortic arch, the hope of restoration and repair lies mainly in the recovery of the elastic wall by the reduction of the distending force. Properly to conceive such yielding of the entire wall, or true aneurism, whether fusiform or globular, we must think of atheromatous change in the arterial walls as a general condition,—apt, however, to be most pronounced in the aortic arch, and at points of flexion, as the axillæ and the popliteal and femoral spaces. No doubt, too, syphilis has much to do with the atheromatous process; and so has excessive indulgence in alcohol, especially when combined with good living. Now, if atheroma be a wide-spread degenerative change, only locally more pronounced at certain points rather than elsewhere, it is clear the treatment of it and the resultant complications must rest upon some means of affecting the general condition. The reduction of the internal blood-pressure is, clearly, the thing to be aimed at. Perhaps it will be most instructive to the reader to pursue the further history of the above case so far as it is at present known to me. The letter in which some details were given had not left the American shore on its return journey to England before the catastrophe I there said was to be apprehended actually occurred. A well-known member of the profession called upon me, asking if I remembered the reverend gentleman. Perfectly, was my reply. Would I object to telling him what I knew of the case first? and then he would tell me what he knew about it. So a sketch of the case was briefly given, and stress laid upon the dietary as an essential factor in the treatment. He listened attentively, and then told his part of the story. He had been telegraphed for to a well-known sea-side resort on the southern coast to see the patient. He found him sitting up, being unable to lie down, spitting blood freely, with congestion of the base of the left lung, and a huge pulsating

bulging under the left scapula. This was what the good lady had achieved with her misdirected energy. In the former letter is written, "There is no moral doubt that, with the best intentions in the world, the devoted wife is doing her best to increase the blood-pressure within that impaired aortic arch by feeding him upon sustaining victuals, with the immediate result of his feeling better for the time. But the result is not one difficult to calculate. The aorta will soon yield again, and ultimately rupture, just as an old boiler bursts when the pressure of steam within it is high enough." Well, the rupture may or may not have taken place yet,—or may never take place, because the patient will not live long enough. But the first part of the forecast has been realized with terrible swiftness. The more liberal dietary has increased the distending power of the blood-current, and the aortic wall has yielded under it. It adds to the interest of the case to know that the bulgings at the carotid roots have passed away. Under the treatment they were much reduced, especially the left side, and the huge dilated aorta, once to be felt distinctly in the sternal notch, had been reduced till it could no longer be reached by the finger. But when the new aneurismal bulging was established, the old mischief in front was "all quiet and flat," my informant told me. When thus further relieved, the elastic coat soon recovered itself. There are two matters involved in this which are not uninteresting as a contribution to our acquaintance with the natural history of aneurism. The first is, that when the blood-pressure was once more increased the bulging did not reappear at its old seat. Possibly this was due to the wall at the bulgings being strengthened by a deposit of fibrin, and another area had become the point of least resistance. If this is the veritable explanation, then comes this second matter. If the arterial wall was so strengthened by this layer of fibrin deposited on it, how does it happen that the bulgings passed away, so that all was "flat"? It could only have been by further diminution of the distended arterial wall by virtue of its own elasticity, which overcame any opposition set up by the layer of fibrin. Anyhow, as it stands, without any further details, the case has a history which clearly teaches an important lesson. It tells us, in unmistakable accents, that the associations of aneurism are such that the first indication in the treatment is to lower the blood-pressure within the arteries. Albertini and Valsalva bled and starved; and a very good, if heroic, plan it was. Though their especial aim was the furthering of a deposit of fibrin, they attained by these means a marked diminution of the arterial tension; and this, again, led to the diminution of the aneurismal sac by the resilience of the elastic fibre of the arterial wall. An

aneurism is a most serious thing under all circumstances, and the sooner it can be dealt with the better. To starve, even to bleed, if indicated, and absolute rest, as absolute as is necessitated by a broken thigh, are the measures which commend themselves from the moment any yielding of the arterial walls is gravely suspected.

There is a matter of diagnostic moment which has been forced upon my mental processes during the last couple of years especially; and that is mitral stenosis in advanced life. With mitral stenosis in the young as the resultant product of rheumatic fever we are all familiar. There is the characteristic murmur, presystolic in time, long, as the ventricle slowly fills, often accompanied by a thrill from the vibration set up by the blood-current and conveyed by the blood-stream away to the right apex. There are other points; but these are sufficient to identify the correlative pathological condition and to tell us that the lesion is obstruction and not regurgitation. Indeed, the diagnosis of mitral stenosis has rather been obscured than cleared by the many signs which some have given as necessary to its correct recognition, and so there is an impression abroad that there is something mysterious and difficult about the diagnosis of mitral stenosis. If the general practitioner wishes to be quite certain about any mitral murmur, let him further remember that a mitral obstructive murmur is heard better to the right of the left apex, a mitral regurgitant away to the left, even to the spine in many cases. A mitral obstructive murmur, when not loud and long, is heard over only a comparatively limited area,—so limited that it is easily overlooked if its precise locality is not borne in mind. A hasty examination of the heart is very apt to overlook a faint mitral obstructive bruit. Then, again, in mitral regurgitation the pulse is irregular in volume, according to whether much or little blood regurgitates in each systole through the wide mitral ostium, insufficiently closed by the valve-curtains, often themselves deformed by valvulitis; while in mitral stenosis the pulse is small but regular. George Balfour, the eminent Edinburgh authority on the diseases of the heart, has found in his experience considerable irregularity in the pulse in mitral stenosis; but in this his experience is not in unison with that of London writers on the subject. The pulse, indeed, of mitral stenosis has little in it to arouse suspicion. Frequently it is not to be distinguished from the weak, small, compressible pulse of asthenia. Consequently, in many instances the mitral lesion is not detected. This is a matter to be regretted, as the presence of the mitral mischief is important prognostically. At times, doubtless, it is an old static affair, the consequence of some by-past valvulitis, slight in amount, and with

little significance attaching to it. But, unfortunately, these are not its only associations. Very frequently its causation is entirely different; and some discussion of those other circumstances under which mitral stenosis is found as a grave and serious matter is permissible. It is now a well-recognized fact that strain is a common exciting cause of inflammation of the valves of the heart. Sometimes the injury done is acute, going on rapidly from bad to worse. More often it is limited, and, soon becoming quiescent, the patient is little worse, and the injury done is felt only on exertion, as Latham long ago pointed out. Such a case is well known to me. The lady, famous in the literary world, had a slight mitral obstructive bruit. This dates back some ten years, and was brought on by severe effort, going in search of a medical man under great emotion and not readily finding one. She was ill after the effort, and the bruit was then heard; and ever since she has had some dyspnoea, with palpitation, on effort. When quiet at her desk she knows nothing of her heart. Strain has been more particularly recognized as being associated with aortic disease, especially regurgitation. The association of aortic valvulitis leading to insufficiency of the cusps, with more or less of dilatation of the aortic conus, with sustained effort, is well known to all. But the relations of mitral valvulitis to strain are not nearly so widely recognized. Yet an extending experience tells me that such relation is far more frequent than is generally credited. The mitral valve-curtains bear the strain of the contracting left ventricle on each systole. When the left ventricle is hypertrophied, and its contraction consequently more powerful (to overcome the resistance set up by a high blood-pressure in the arteries), then the strain on the mitral valve-curtains is increased. Under these circumstances, can we be surprised if they become the seat of valvulitis? Such valvulitis, too, is progressive, as a rule,—perhaps slowly in many cases, but nevertheless tending to move onward to further and further deformity and mutilation of the valve-curtains. The lesion may take the direction of enlargement of the ostium with contraction of the free edges of the valves, until insufficiency is reached. Or the morbid process may sweep along the basal attachments of the valve-curtains, soldering the two segments together, and ultimately fusing both valves into a finger-like cone pointing in to the left ventricle, perforated by a channel with rough surfaces. When such a lesion is established, then there is the long murmur with some vibratile thrill. But as years advance the march of pathological processes is slower than in youth. A considerable progress has been made before such evidences of morbid changes are furnished. There is a history of organic mischief before it becomes sufficiently pronounced to give rise to a murmur.



This has been denominated by me, elsewhere, "the premurmuric stage of valvulitis." And when the pathological process has become sufficiently established to give rise to a murmur, that murmur at first is soft, low, and heard over a very limited area. Often it is possible gravely to suspect valve-changes being afoot before the significant murmur can be detected. We are not yet, however, sufficiently advanced in our acquaintance with cardiac pathology positively to recognize valvular lesions in the absence of a murmur; and yet in many cases the murmur is but the corroboration of a diagnosis formed from other data. The diagnosis of diseases of the heart is not a mere question of murmurs; at least, so a very eminent authority on the subject and myself agreed the other day when discussing the precise nature of a case we saw together. But what a teacher who promulgated such a view could do with a class of students is as incomprehensible as the view over the terminal edge of the universe. But when the student has completely mastered his murmurs, he may probably advance to some rational comprehension of the various morbid changes in the heart, and begin to think about the heart as a muscle subject to the conditions which affect muscles generally. Anyhow, he may begin to believe that there is something else than a murmur to be calculated in the diagnosis of cardiac affections. It is not my intention here, however, to discuss the "pre-murmuric stage" of valvulitis, but rather the more advanced condition when a murmur is actually present,—a small, brief, scarcely audible whiff, heard over a very small area, ordinarily not an inch square. This is a broad sketch of the circumstances under which this murmur is usually heard; and experience is telling plainly that the condition is one more frequent than is supposed. A man up in years has begun to fail. He is not capable of the exertion in which he previously delighted. He cannot climb a hill very comfortably, and finds mounting the stairs a task. Yet he has no palpitation, nor is the pulse irregular or intermittent. He consults his medical man: a cursory examination of the chest follows, nothing is discovered, and the opinion given is that it is a case of general debility, requiring rest. The advice is followed, with satisfactory results; but when work is resumed it soon becomes clear that there is something definitely wrong. A consultant makes a careful examination, and then the mitral whiff is discovered. When the heart was first examined, probably the consultant would have found nothing; but the disease has advanced in the mean time, and his diagnosis is readily corroborated by the ordinary medical attendant on re-examination. Now, there is nobody to blame here; but, as human nature stands at present, it is very likely that somebody will, sooner or later, suggest that

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the ordinary medical attendant was either careless in his examination, or is not an adept at the detection of incipient cardiac disease; and not unlikely this is repeated until a certain number of persons believe it, and undeserved injury is done to the medical man. Perhaps, too, there was a murmur established at the time of the first examination which was overlooked. In such case much may occur that is afterwards the source of unavailing regret. When a man up in years is obviously failing, and at the same time a cardiac bruit is detected, the lookout is decidedly dark and full of cause for just apprehension. The early recognition of the actual state of affairs may enable him to make business arrangements which can only be made at a great sacrifice if delayed till his health is obviously broken. It is not so much that can be done for such cases by treatment,—though of course rest is of great service, and that regimen and dietary which will keep the blood-pressure in the arteries low,—as in the business aspect of the case. Say it is a medical brother. If his mitral lesion is detected early, he can set to work about retiring from practice, introducing a successor, etc., all of which is good for everybody, patients and doctors alike; and then he can lead a quiet life, which is conducive to his living as long as the nature of the case will permit. If the case goes on undetected, the poor doctor struggles on with an assistant, and, when the inevitable break-down comes, everybody is more or less taken by surprise, and such arrangements have to be made as the circumstances permit. This is very important for all concerned; and though, of course, a diagnosis which leads to practical therapeutic benefit to a patient is always the most gratifying to the practitioner, still it is something to have prevented trouble which otherwise would in all probability have arisen had the precise pathological condition not been observed in good time. In all cases of thoracic disease it is well, yea, it is very well, to count the pulse and the respiration and take the ratio. When the ratio is preserved, yet both accelerated, it is well to take the temperature. When, however, the temperature is normal and both are not accelerated, then look for the reason why the one is. When the pulse rises in rapidity while the respiration is normal, the condition of the left ventricle and the mitral orifice must be carefully examined. But when the opposite condition is found,—when the breathing is accelerated and there exists no obvious lung-condition to account for it,—then, depend upon it, the thoracic space is diminished from some cause, whether it can be discovered or not. Not uncommonly it is possible to suspect some damming of the blood at the mitral orifice, which leads to an overfull condition of the pulmonic circulation, and the excess of blood limits the thoracic space. Then listen to the closure of the pul-

monic valves: hear what they have to say. Your suspicions may be confirmed, and perhaps after a while a mitral whiff develops to settle the matter. Conversely, when you catch a mitral murmur, and the respiration is not accelerated nor the pulmonic valve-sound accentuated, the lesion is small, no matter how loud the murmur. Finally, it is quite possible at times to apprehend mitral stenosis before a murmur is audible. Often the murmur is to be heard only when carefully sought for.

J. MILNER FOTHERGILL.

### THE ASSAULT UPON DR. GRAY.

UTICA, N. Y., March 29, 1882.

MY DEAR DOCTOR,—Your letter is at hand, and I hasten to comply with your kind request for some information regarding the assault upon Dr. Gray for publication in the *Times*, first thanking you for your kind words of sympathy and congratulation.

Dr. Gray returned from Washington at 5.45 on the evening of the 16th instant, where he had been to consult with District-Attorney Corkhill on the medical portion of the bill of exceptions in the Guiteau case. After tea he came down-stairs to his private office. At about five minutes after seven I stepped across the hall from the library to give him his personal mail, which had accumulated in his absence. I found him seated at his table, facing Dr. Gibson, the chaplain of the institution, who was reading to him a translation of one of the odes of Horace, which he had made. At a corner of the table, and at Dr. Gibson's right, stood Dr. Blumer (of the staff), whom you know, and at Dr. Gray's right, and a little behind him, stood Mr. John P. Gray, Jr. Just as I left the office, after explaining one or two letters to the doctor, he reached across the table and took the manuscript from Dr. Gibson and leaned forward to examine it. I think I could hardly have been away five minutes before the assailant entered the front door of the asylum and passed leisurely down the hall, glancing into the library as he went, to Dr. Gray's office. Stepping just within the door, which stood open, he raised a large navy revolver, carrying a No. 38 calibre ball, pointed it at Dr. Gray's head, and fired, and, turning rapidly upon his heel, left the building. He was immediately followed by Dr. Blumer and Mr. Gray. As they reached the portico of the asylum the assailant was some twenty or thirty feet down the lawn, where he stopped and fired again and disappeared in the darkness. Dr. Russell, who was seated in the library across the hall, gave immediate attention to Dr. Gray, and word was sent to me in the wards. Hemorrhage at first was quite profuse, the blood coming from both bullet-holes and from his mouth and nose. An examination revealed that the hemorrhage

from the mouth came from the posterior nares, and that no important vessels were wounded and possibly no bony structure injured. The ball entered the face over the left malar bone, three-eighths of an inch below the external canthus of the eye, passed diagonally down back of the nose, just above the anterior nasal spine of the superior maxillary bone, emerging in the centre of the right cheek two and a half inches below the external canthus of the right eye, and about half an inch back of a vertical line dropped from that point. In its passage the ball injured some portions of the nasal and labial branches of the superior maxillary nerve, and at first there was complete anæsthesia of the left side of the nose, and of the left upper lip, with some hyperæsthesia of the right half of the upper lip. This condition continues, but in a less degree. There was immediate infiltration into the tissues about the left eye, so much so, indeed, that, though I attempted to examine for any injury to the globe which might be present from powder-burns, it was with great difficulty I was able to separate the lids. In a short time the right eye was in a similar condition, and the whole face distorted beyond all recognition. The left side of the face was quite filled with powder, so close was the pistol held to the head when fired. The treatment consisted in the constant application of iced cloths for the first forty-eight hours, and in securing constant and thorough drainage through the nose. We have given him quinine, light but nutritious diet, and moderate stimulation. In two or three days the swelling subsided markedly, and at the end of a week the infiltrated material had been absorbed to such a degree that the track of the bullet through the tissues of the face could be easily discerned. The left lower eyelid is still quite œdematous. The bullet-wounds united for a greater portion by first intention, and the discharge has been very slight from either the orifice of entrance or exit. The temperature has never reached above 100°, and only attained that point on the evenings of the third and fourth days after the injury. The morning temperature has never exceeded 99.8°. At the time of the accident, Dr. Gray never for a moment seemed to lose self-possession. His pulse was even, and ranged between 80 and 90. As well as he could, he assisted us by suggestions in the treatment of the case, and aided himself in every possible way. He is now sitting up a portion of each day. The openings into the anterior nares are closing nicely by granulation, and the orifices of exit and entrance have diminished markedly in size and are looking excellently well. There is still considerable discomfort and pain, but through it all the doctor has manifested a remarkably cheerful and hopeful disposition, although for the first few days we who had the care of him were extremely anxious.

The assailant has been indicted for assault with intent to kill, and a commission, composed of Hon. Wm. H. Bright, of this city, Dr. Thomas M. Flandrau, of Rome, and Dr. Carlos F. MacDonald, of the State Criminal Asylum, Auburn, has been appointed to examine him and report to the court. If you desire, when they have made their report, I will inform you of the result.

E. N. BRUSH, Asst. Phys'n.

## OBSTETRICAL WARDS OF PHILADELPHIA HOSPITAL.

EDITOR PHILADELPHIA MEDICAL TIMES:

DEAR SIR,—You requested me some days ago to give you a statement of the mortality in the obstetrical wards of the Philadelphia Hospital. I have thought it sufficient, as serving all purposes, to collect those cases only for the past decade, simply because the accusation made in one of the Philadelphia papers of a large mortality-rate was based upon that period, and because my own individual experience would enable me to verify the records. I am indebted to Dr. C. W. Milliken, Resident Physician, for the figures I send you.

From January 1, 1871, to January 1, 1882,—a period of eleven years,—two thousand and forty women were delivered in the house. Of these, fourteen hundred and fifty were single, and five hundred and ninety were said to be married,—but in all probability the majority of these also were single women.

Of course most of the single were primiparæ, and among these were many forceps cases, tedious labors, varied presentations, etc. There were thirty-four twin labors.

The total number of children born during this period was two thousand and seventy-four.

From January 1, 1871, to January 1, 1875, there were thirteen hundred and sixty-seven confinements. The mortality during this period among the women was twenty-five, all reported as single, making an average of 1+ per cent. But few of these cases died of disease incident to delivery, for we find them entered as peritonitis, pelvic cellulitis, septicæmia, scarlet fever, uræmia, hemorrhage, rupture of uterus, œdema of lungs, pneumonia, and phthisis. Some of these deaths occurred in women who were in labor when admitted, or those who had been abused and maltreated before entrance to the house. Others, again, had suffered from constitutional disease long before their admission to this department, having been treated on the *venereal floor* at various periods.

Again, woman have been confined who were habitual debauchees, and some were in advanced intoxication during labor itself. In fact, many have belonged to the *slums*, and

have been admitted to this institution,—the only one which exists for them,—have been associated there with those of a better class who have fallen, contaminated the latter, and dragged them still further down by their association, and, as our case-books show, given us diseases and also mortality.

In 1877, puerperal septicæmia showed itself in almost epidemic form, possibly originating from a case of facial erysipelas and one of malignant scarlatina. Including these cases, we find altogether sixty-seven deaths until January 1, 1882, a period of eleven years, which gives us a mortality record of three and one-third per cent. In 1877 alone thirteen deaths occurred from "puerperal fever." But it may be remarked that at least thirty of these deaths—those due to puerperal fever, peritonitis, and scarlet fever—occurred during two marked epidemics (the one and most fatal having arisen from a case of scarlet fever which originated outside and developed immediately after confinement); and, deducting these cases from the number, it would give us the average death-rate per cent. for eight years as four deaths in every three hundred confinements. All these figures have been based upon the statistics taken from the books until four weeks after delivery. This gives a pretty good showing for a lying-in hospital occupying the central portion of a large city general hospital (taking everything but smallpox, and even getting some of that unsolicited), receiving all classes of cases from the great unwashed lowest circle of society (?), and having within the enclosure accommodations for paupers, insane, etc.,—a resident population of at times three thousand beings.\*

Playfair says that "the nearest approach to a reliable estimate is that made by Dr. Mathews Duncan,† who calculates, from figures derived from various sources, that not fewer than one out of every one hundred and twenty women delivered at or near full time dies within four weeks of childbirth." He also quotes from McClintock, who estimates the mortality in England and Wales as one in one hundred and twenty-six; in the upper and middle classes as about one in one hundred and forty-six. "More recently he has come to the conclusion, from his own increased experience and the published results of the practice of others, that one in one hundred would more correctly represent the rate of puerperal mortality."

Speaking of the death-rate of puerperal septicæmia in lying-in hospitals, Dr. Playfair† says, "Thus, it prevailed in London in the years 1760, 1768, 1770, to such an extent that

\* See Medical Times for February 14, 1880,—Dr. Parish, "On Puerperal Septicæmia in Philadelphia Hospital." During the decade preceding 1879 there were one thousand eight hundred and seventy-two confinements, with sixty deaths,—"only a little over three per cent. of the cases of confinement," including puerperal fever.

† Edinburgh Medical Journal, November, 1869.

† Dublin Quarterly Journal, August, 1869.

in some lying-in institutions nearly all the patients died. Of the Edinburgh Infirmary in 1773 it is stated that almost every woman, as soon as she was delivered, or perhaps about twenty-four hours after, was seized with it, *and all of them died*, though every method was used to cure the disorder." "In the Maison d'Accouchement of Paris, in a number of different years, sometimes as many as one in three of the women delivered died, on one occasion ten women dying out of fifteen delivered. . . . In Vienna, where in 1823 nineteen per cent. of all the cases died, and in 1842 sixteen per cent. . . . In Berlin in 1862 hardly a single patient escaped."

An average death-rate, then, of about three in a hundred, including puerperal fever, epidemics and all, is certainly surprising, and can be accounted for only by the care with which such cases are nursed and treated and the thorough ventilation of the large and well-aired wards. I believe that should the pauper element (the almshouse) be removed, and a little extra spent in flooring, wire beds, etc., and proper heating, the mortality-rate would soon be reduced to that of private practice, which it now almost reaches.

I am, very respectfully, yours,  
JOHN M. KEATING, M.D.

## PROCEEDINGS OF SOCIETIES.

### PHILADELPHIA COUNTY MEDICAL SOCIETY.

A SPECIAL meeting of the Society was held, December 2, to discuss cases presented by the Committee on Clinical Pathology, Dr. Albert H. Smith, President of the Society, in the chair.

#### SUPPOSED CASE OF ELEPHANTIASIS OF LEG.

Dr. J. R. Evans, of Branchtown, presented, by permission of the Society, a case of a white boy who had chronic enlargement of the leg, following an ulcer over the right ankle. The disease was thought to be elephantiasis.

After a general examination of the patient by the members, Dr. Chas. L. Turnbull inquired whether there had been any examination of the blood: the observations of Dr. Manson, of Amoy, having shown some connection between *filaria hominis* and elephantiasis.

Dr. F. Woodbury said that the conditions present did not correspond with elephantiasis, at least of those in the cases he had seen, but looked more like hypertrophied cellular tissue and chronic oedema accompanying a neglected wound. The treatment would decide the diagnosis, however, and he believed that compression by strapping, or with a rubber bandage, would cure the case.

Dr. Evans said that the rubber bandage

had been already used, without good effect. In reply to Dr. Turnbull, he said that the blood had not yet been examined.

Dr. Schapringher said that a Martin's elastic bandage had been used for a month in this case without any advantage.

Dr. H. Rich insisted that in order for it to succeed the bandage should be skilfully applied. It makes a vast difference who applies the bandage.

#### PARALYSIS FOLLOWING CHOLERA MORBUS.

Dr. Wood, in presenting a case to the Society, stated that every practitioner knows that diphtheria frequently has for its sequela various paralyses, but that it is not so universally recognized that almost all acute diseases are liable to be followed by palsy, and that after dysentery and cholera morbus paralytic symptoms are not very infrequent. Of all the instances he had seen of paraplegia occurring as a sequela to acute disease of other than the nervous system, the greater number came under observation after cholera morbus. In such instances the paralysis is often followed by pricking and numbness in the legs. The patient now presented tells us that four or five weeks after the attack of cholera, on attempting to get out of bed, he found a loss of power in the legs. When admitted to the hospital, six weeks ago, he was unable to stand; he could only move the legs feebly; the arms also were profoundly affected. There was no difference between the two sides that could be registered by the thermometer.

The explanation given by the speaker was that in such cases there is a congestion of the spinal cord, due to relaxation of the spinal vessels; although this has not been proved by autopsy to be correct. The patient, however, on this view was ordered ergotin, and during the last three weeks he had taken from twenty-five to thirty grains of ergotin per day, with small doses of iodide of potassium.

It should have been stated that, when he came in, the patellar tendon reflex was completely suspended: this symptom is not much better at present, although he has recovered the power of his hands and can use his legs so as to be able to walk about, and even can go up- and down-stairs. There is no history of venereal disease.

Dr. F. Woodbury inquired whether there had not been some wasting of the muscles, and, if so, would it not indicate a graver condition as the cause of the paralysis than simple congestion? What are the distinguishing points that separate this case from one of anterior poliomyelitis, for instance?

Dr. Wood said that in regard to diagnosis, of course, the explanation he had given was hypothetical in so far as it was not confirmed by an autopsy, but he had no doubt of the existence of spinal congestion. Neither



the degree of wasting nor the amount of loss of electrical reaction was sufficient to stamp the case as one of poliomyelitis, although poliomyelitis might arise in a similar manner, and he had seen symptoms of it in a child after over-exertion in walking, passing away in the course of twenty-four hours. In cases where the symptoms pass off in the course of a few weeks, he could not bring himself to believe that there was any grave lesion in the beginning.

#### PATULOUS FALLOPIAN TUBES.

Dr. Chas. H. Thomas reported the following interesting case. A married woman, about 40 years of age, came to the Lying-in Charity, about twelve years ago, with the history of having had seven successive miscarriages. On searching for the cause, he found and removed a number of sessile polypi. She afterwards had two living children. Subsequently, about two years ago, he had been sent for, with the statement that she was miscarrying and in her sixth week. Upon reaching the house, he learned that a solid mass had been passed and which had been lost; she was bleeding continuously; the os was firmly contracted and would not admit the finger, and he was led to question whether it were an early miscarriage or a recurrence of the polypoid growths. He then determined to make an exploration, in which he was assisted by Dr. John B. Roberts, who administered ether. After rapidly dilating the cervix, he introduced a round wire curette, modified from that of Dr. T. Gaillard Thomas, and which he here exhibited to the Society, by the use of which as an exploring instrument he claimed that he is able to obtain a far better impression of the state of the cavity and lining of the uterus than can be obtained by the ordinary probe or sound. The instrument was seventeen centimetres in length and six millimetres broad in the loop. The patient being placed upon her back and ether administered, he seized the posterior lip of the os with the tenaculum and drew it down to the vulvar orifice. The curette being introduced went in three and a half inches and encountered the arch of the fundus uteri and some placental tissue which was recognized under the microscope as such by Dr. J. G. Richardson, but found no more polypi. Holding the curette now between the thumb and forefinger as a probe while moving it about over the interior surface of the womb and without using any force, upon directing towards the left cornua the instrument suddenly slipped in, the handle of the instrument being brought up to the external os. While holding it in this position, he discovered that by tilting the handle backward the loop of the curette was plainly palpable through the thin abdominal wall on a level with and about two and a half inches to the left of the umbilicus, and

evidently in the peritoneal cavity. He then withdrew the curette and reinserted it, directing it towards the opposite cornua, when it passed, as before, the whole length of its shaft, reaching a corresponding point on the right side of the abdomen. In neither of these positions could the instrument be brought within an inch of the *linea alba*. For a few days after the examination there was a slight rise in temperature and some pelvic soreness, but no evidence of peritonitis. The patient at the end of a week was well, and has since been pregnant. After the last delivery, in order to satisfy his mind and to remove the placenta entirely, he passed his hand into the uterine cavity, but found no abnormality of development.

Dr. Blackwood inquired what grounds there were for believing that the instrument traversed the Fallopian tubes. The direction of the instrument towards the umbilicus did not correspond with the course of the Fallopian tubes when the ovary is high up. He referred to a case occurring in New York where an ordinary sound had been passed through the fundus of the uterus while making an examination; in the same way an umbrella-rib had been pushed through the uterus up into the left lung in an attempt to produce abortion. The curette has also penetrated the fundus before now.

Dr. Parish thought it more probable that the instrument passed along the tube than through the uterus, on account of the shape of the terminal loop, and also from the slight consequences. The fact that the Fallopian tubes may be patulous should lead to special care in making intra-uterine injections, to see that the os is also open so as to allow a free return of the fluids.

Dr. Thomas confirmed the remark of the last speaker that the instrument used would not penetrate the uterine walls without unusual force being applied. In this respect it is very different from the ordinary uterine sound. As to its direction, the instrument did not appear in the middle line, but to the right or left of the umbilicus. He recalled the fact that, in order to confirm his suspicions, he passed it into the right cornua twice and once into the left, in order to demonstrate it to Dr. Roberts; but he used the instrument with extreme delicacy.

#### PRIMARY TUBERCULOSIS OF THE LARYNX.

Dr. J. Solis Cohen exhibited a specimen of primary tuberculosis of the larynx occurring in a man 47 years of age, which was only the second case that he had encountered in his practice. The lungs were secondarily involved, and the patient died with apnoea. The specimen demonstrated entire destruction of the epiglottis, and the larynx was much diseased, but the morbid action stopped at the true vocal cords, the trachea below appearing perfectly healthy. The lungs were

both tuberculous. In regard to the exciting cause of the malady, the patient was a driver of an ice-wagon, and very much exposed to cold and damp.

Dr. C. Seiler exhibited microscopic sections of parts of the tuberculous epiglottis and larynx proper. In another case he had found tuberculous nodules also in the uvula. The appearances of the epiglottis and larynx are so marked that he looked upon them as characteristic, and as being valuable in making a diagnosis of tubercular phthisis.

#### PREGNANCY COMPLICATED WITH CANCER.

Dr. H. E. Dwight reported a case of cancer of the uterine cervix in which pregnancy occurred, and presented the specimen obtained at the post-mortem nearly a year later.

#### TREATMENT OF GONORRHEA.

Dr. Joseph Hearn recommended the following combination for reducing the amount of gonorrhœal discharge: the prescription originally was one of Prof. Pancoast's:

R Aluminis pulv., ʒj;  
Cubebæ pulv., ʒvij;  
Myristicæ pulv., ʒij;  
Cinnamomi pulv., ʒij.

M. Ft. chart. no. xx.

These powders may be given several times a day, and in some cases the amount of cubebs may be greatly increased. Whenever the discharge is profuse, a few doses of the powders will reduce it.

Dr. MacFerran said that he had found good results from *hydrastis Canadensis*, twenty grains being given in an ounce of water three or four times daily.

#### MODEL OF OFFICE CHAIR.

Dr. Wm. B. Atkinson exhibited a model of an office and operating chair.

#### OVARIAN TUMOR.

Dr. W. W. Keen presented a specimen of a large ovarian tumor, which was, on request, referred for microscopical examination. The interest in this case centred in the fact that it had been complicated with a double oblique inguinal hernia (see p. 449).

A CONVERSATIONAL meeting was held at the Hall of the College of Physicians, Philadelphia, December 28, 1881, at which Dr. O. H. Allis read a paper entitled "What is the Best Cure in Hip-Joint Disease?" (see p. 451). Dr. Jas. H. Hutchinson also read a Memoir of Dr. H. Lenox Hodge, which was, on motion, referred to the State Medical Society for publication.

Dr. J. M. Barton remarked that he would strongly endorse the position taken by Dr. Allis. In those cases where the inflammatory symptoms have run high, where there have been decided nocturnal pains and great

thickening of the surrounding tissues, he is now in the habit of making no effort whatever to regain motion in the joint.

His experience has been somewhat similar to that of the lecturer, and he regards a stiff joint as a favorable compromise in this class of cases. He would even go further, and consider that where the inflammatory symptoms have been decided and prolonged, there is more risk of further trouble with a movable joint than where anchylosis has taken place. In such a case inflammatory changes have occurred in the tissues around the joint, which may readily give way under some strain, or may as readily re-inflame and cause further articular destruction before being again arrested.

He recalled two cases where full recovery took place with a movable joint after a decided coxalgia, lasting in one case over a year and in the other eighteen months.

In one of them, a girl of 7 years, the nocturnal pains were so severe as to require fifty-five drops of laudanum to give ease, the actual cautery was used, and later he was obliged to puncture the capsule. A perfect recovery followed, so that the child was able to dance fancy dances. In about a year the disease returned, and after several months of rest she again recovered, with a movable joint. Since then a distinct dislocation occurred while in bed, and, though readily reduced, the wasted and absorbed head remained but a few weeks in the enlarged acetabulum: the patient now has a wasted, shortened limb, with the great trochanter articulating upon the gluteal muscles for a hip-joint. The second case had a similar experience in the first instance, but the return of the disease was followed by abscess, and, though he removed the head of the femur, the case terminated fatally. Cases terminating in a fully-anchylosed joint rarely have a return of the disease, and then usually of short duration and requiring but little treatment.

It had also been his experience to see immediate and disastrous inflammation follow the most gentle passive motion; and, though many cases of coxalgia in the earlier stages recover with movable joints, he doubted if the "passive motion" instituted by the surgeon contributed much to this result, the child's own efforts being usually quite sufficient.

In regard to the position of the limb after recovery, the lecturer suggested that it should be left slightly flexed: Dr. Barton stated that it usually is so,—that one of the evidences of a distended capsular ligament is slight flexion of the limb. Indeed, one of the most reliable points in the diagnosis of coxalgia is based on this deformity, and, try as we may during treatment to efface it, we usually fail to do so, and where the joint anchyloses the position is still maintained.

Dr. De F. Willard said that if the question under discussion was as to the best cure of

hip disease, then there would be great latitude for differences of opinion; but, as the lecturer had limited his remarks simply to those cases in which *destruction of the joint* had already occurred, he could heartily concur in the conclusion that the patient who had recovered with a femur firmly and securely ankylosed in a good and useful position should consider himself exceedingly fortunate, and that any attempt at restitution of such a fixed joint was unwarrantable.

He had only recently seen three cases in which violent and destructive inflammation had been awakened in long-quiet joints: in the one case, by an accident; in another, by excessive dancing; in another, by the surgeon's manipulations.

It should be constantly remembered that the condition of the tissues was an entirely different one from that which follows a fracture. In the one case, the tendency of any inflammation which might be aroused by passive motion would be to resolution; in the other instance all the tissues were unhealthy, were prone to retrograde, were in that condition in which the products of any inflammation, however slight, would most probably tend to break down rather than to organize.

It was from disregard of this that the surgeons who insisted most upon the desirability of a movable joint after hip disease were the ones who performed the most resections, the operation being the legitimate result of their treatment.

Should the ankylosed position be one unfavorable for locomotion, he would practise subcutaneous osteotomy rather than run the risk of exciting destructive inflammation in a region where the tissues were unhealthy and where there was really no sound joint-structure remaining.

#### PHILADELPHIA ACADEMY OF SURGERY.

STATED MEETING OF FEBRUARY 6, 1882.

DR. S. D. GROSS, President, in the Chair.

#### A NEW MATERIAL FOR THE DRAINAGE OF DEEP WOUNDS.

DR. LEVIS presented a material for the drainage of deep wounds. He referred to the disadvantages of the india-rubber tubes as generally used for the purpose, and stated that they soon become occluded by viscid matters. Their pervious condition is soon lost, and their contents become septic and sources of danger.

The material that he uses exclusively in surgical drainage is simply threads of india-rubber such as are used in weaving elastic textures. Their softness and pliability render them mechanically unirritating in wounds. Any number may be introduced, varying with the extent of the suppurating cavity; and, if

desired, they can be removed singly, thus gradually decreasing the drainage. The material is inexpensive, and may be obtained from any dealer in india-rubber goods.

Dr. Levis showed a patient upon whom he had practised a rather new operation for restoring a large portion of the lower lip of a girl about 12 years of age. The deformity was the result of gangrene after typhoid fever. He had utilized a portion of the vermilion border of the upper lip, which, by twisting, filled up the gap left after freshening the margin of the labial deficiency. His remarks were accompanied with diagrams illustrating the various steps of the operation.

#### DISLOCATION BACKWARD OF THE HEADS OF BOTH TIBIÆ, DUE TO HYPERTROPHY FROM CONGENITAL SYPHILITIC OSTITIS, AND PRODUCING HYPERTROPHY OF THE LEGS.

Dr. Levis showed two amputated limbs of a boy 12 years old, whose history was that of congenital syphilis.

Amputation through the lower thirds of both thighs had been performed, and the patient was convalescing. There was backward dislocation of the heads of both tibiæ, impeding venous return through the popliteal spaces, and resulting in great œdema and general hypertrophy of the legs and feet, and presenting the general characteristics of elephantiasis. An eczematous eruption spread over the entire integument of the limbs.

The following report of the pathological examination of the joints is furnished by Dr. Longstreth, one of the physicians of the Pennsylvania Hospital.

The motion of the knee-joint is very limited. The leg can be moved on the thigh, so as to describe an arc of not more than fifteen degrees. The patellæ are movable over the condyles of the femur, but seem to be attached to the surface of that bone by loose fibrous adhesions. In the right leg the patella occupies a position on the outer condyle, while in the left it is placed nearly centrally in the condyloid notch.

In both knees the articulation with the heads of the tibia is formed on the posterior aspect of the condyles. In both joints the end of the femur, with the patella, projects two and a half inches forward from the line of the spine of the tibia. The projection looks not unlike the prominence formed by an enormous bursal tumor. The angle formed between the femur and the tibia when the leg is in position of greatest extension, measured on the under surface of the limb, is about 130°. The angle when these bones are at their greatest flexion cannot be reduced to less than 110° or 115°. The border of the articular surface of the tibia slopes downward and forward at an angle of about 60°, to accommodate the altered relation to the articulating end of the femur.

A longitudinal section made through the

right knee-joint shows the altered relations of the bone. The free articulating surface on the head of the tibia measures not more than an inch and a half laterally, and antero-posteriorly is of even less extent. The remainder of the joint-cavity is closed by firm fibrous adhesions, which extend three-fourths the distance from before backward across the head of the tibia. An extension of the joint-cavity has taken place forward and down the face of the tibia towards its tubercle. This new surface is covered by tissue resembling fibro-cartilage, and is continuous with the articular cartilage and with that of the epiphyseal junction. Little or no trace of the crucial ligaments of the joint can be seen, but the articular cartilage over both the femur and the tibia is everywhere present, as in the normal joint. The cross-section of the bone shows marked changes both of its medullary canal and of its compact tissue. The medullary spaces are increased in size and are filled with a blood-red pulp. The compact tissue of the shaft is very considerably reduced in thickness, and strong pressure with the finger is capable of compressing and bending the bone. The tissues at the posterior part of the head of the tibia and the newly-formed popliteal space are worthy of special attention. At the back of the tibia the skin and the muscular tissues have been compressed, and with them the blood-vessels have also suffered compression. This pressure must necessarily have interfered with the return of venous blood, and have contributed to, if not entirely caused, the enlargement of the feet and legs.

#### SURFACE THERMOMETERS.

Dr. Packard exhibited several varieties of surface thermometers, and detailed three cases in which he had recently resorted with advantage to their use.

January 23.—C. F., æt. 23. Suspected abscess in head of tibia. Over ankle and sound knee,  $90^{\circ}$ ; over spot of inflammation,  $95^{\circ}$ .

January 29.—Over ankle and sound knee,  $92.4^{\circ}$ ; over spot of inflammation,  $95^{\circ}$ .

January 29.—J. B. S., æt. 26. Inflammation of eyelid. Over sound eyelid,  $92.4^{\circ}$ ; general temperature,  $92.4^{\circ}$ ; over inflammation,  $93.2^{\circ}$ .

February 6.—J. H., æt. 53. Paralysis of right arm and leg from apoplectic clot ten weeks ago. Left hand,  $91.8^{\circ}$ ; right,  $93.2^{\circ}$ .

#### EXTREME SPINAL DISTORTION.

Dr. Morton exhibited the following case of extreme spinal distortion in a lad who was brought to his clinic at the Orthopædic Hospital in May, 1881. The following notes of the case were prepared by Mr. J. K. Mitchell, of the University of Pennsylvania, at Dr. S. W. Mitchell's clinic, to whom the lad was referred for consultation.

Henry N., aged  $8\frac{1}{2}$  years, born in New York. Mother and mother's family all healthy; father was subject to rheumatism, and died

of "a rheumatic affection." The boy has never had any of the ordinary diseases of childhood. His appearance is healthy; bowels, digestion, and appetite good; he is not small of his age, nor undeveloped. Intelligence appears unimpaired, but speech is rather childish.

The disorders began when the patient was about  $3\frac{1}{2}$  years of age. In November, 1875, it was noticed that he used the right hand awkwardly and preferred the left. He sometimes *fell suddenly* when walking. From that time the progress of the disease has been variable. Twice he has been nearly well without any treatment. He is now (May, 1881) decidedly worse than at any previous time. His appearance is well shown in the photograph. He can stand without assistance for a quarter of a minute, or perhaps half a minute, but he then sinks on to the floor or a chair, with his head sometimes resting on the external malleolus of the right leg. He can walk, but only a few steps. He makes the effort, but invariably crosses his legs and falls.

There seems to be a chronic spastic condition of all the muscles of the right side of the body from the lower border of the armpit to the hip, affecting the right leg, however, but slightly. When he is in the supine position,



his *left* leg is crossed over the right one, at an angle of  $40^{\circ}$  with the transverse axis of the pelvis. This spasm is persistent in sleep, but less violent. The left leg has a spasm on the adductor muscles, and probably in the psoas. There is no paralysis. The response to the faradaic current is slightly exaggerated in the muscles all over the body, and a very weak current will induce contractions. The exami-



nation with the galvanic current was difficult, owing to the boy's fear of it; but the motor and sensory responses to it appeared perfectly normal. Both erector spinæ muscles responded perfectly. Considering the enormous curvature of the spine, the degree of rotation is very slight.

**Diagnosis and Treatment.**—Dr. W. A. Hammond had charge of the patient for nearly a year. Soon after the beginning of the disorder he pronounced the case one of "chorea paralytica," and prescribed arsenic and strychnia, and afterwards bromide of zinc. As none of these medicines were productive of good, Dr. Hammond came to the conclusion that it was not choreoid.\*

Dr. Hammond has since mentioned the case as one of "sclerosis and atrophy of the cerebellum."† In the same place he says that when he last saw the patient there were nystagmus and a "total inability to stand."

Dr. Sayre saw the boy not long after Dr. Hammond, and considered the disorder due to reflex incoördination from a contracted prepuce. He recommended circumcision, which was performed,—without good result, according to Dr. Hammond.‡

Dr. Mitchell considered the trouble choreoid in its nature, and recommended rest in bed, with massage and hypodermic injections of Fowler's solution in increasing doses.

The treatment which the boy had been subjected prior to and after admission having been without benefit, I determined to rectify, as far as possible, the symmetry of the spine, and then to place upon him a felt corset. Having secured the valuable services of Mr. W. H. Johnstone, the lad, after complete anæsthesia, was placed in extension in his apparatus, and by these means the body was effectually and readily straightened, and a very perfect plaster cast of the chest and body was made. A felt splint was then moulded, which laced up in front, and with this the boy has been enabled to walk almost erect, with great comfort, since May, 1881, to the present time. January, 1882, again we admitted him to the Orthopædic Hospital, and lateral steel supports which extended from the spinal jacket to the shoes were added to the brace, which proved of considerable service, the lad readily walking with the additional aid of a cane, and without difficulty can walk erect. The deformity, however, recurs when the splint is removed.

#### PALSY OF BOTH LOWER EXTREMITIES.

Dr. Morton presented the following case of complete (infantile) palsy of both lower extremities, involving the thigh and leg muscles, in which the paralyzed limbs were utilized by flexing the legs upon the thighs, thus forming

a support for artificial limbs, which have been worn with success for a year.

H. B., aged 18 years, had been an inmate of the Philadelphia Almshouse for many years, was deemed an incurable, and was sentenced for life to the pauper department. I was asked to visit him, in order to give an opinion whether or not in any way he could be relieved and made to walk, as he was soon to be transferred from the youths' department, where he had



been so long, to the pauper portion of that institution. His only method, I found, of locomotion was by dragging his body along the floor by means of his hands and arms. I found that he had considerable control of the muscles of the upper part of the thighs. The limbs were extremely atrophied, and presented the usual appearances in such cases. He had been in the habit of keeping his legs tightly drawn upon his thighs, partly for convenience sake; and it then occurred to me that if the atrophied legs and thighs were closely bound together, an excellent support

\* Transactions of the American Neurological Association, 87.

† Diseases of the Nervous System, p. 378, ed. 1881.

‡ Medical and Surgical Reporter, April 7, 1877, p. 301.

might be obtained for an artificial limb. Artificial limbs were adapted, and the result has proved most satisfactory. The lad can now walk a mile or more with the aid of a cane; he has been enabled to earn his living without difficulty at cigar-making, and his physical and mental condition has astonishingly improved.

Amputation, of course, has been suggested; but the boy suffers no inconvenience from having the limbs in the sockets of the artificial limbs, and is averse to their removal. His condition at the time of his removal from the Almshouse was so impaired that an operation then was not even considered.

O. H. ALLIS, M.D.,

Recorder.

## REVIEWS AND BOOK NOTICES.

THE SYMPATHETIC DISEASES OF THE EYE. By LUDWIG MAUTHNER, M.D., Royal Professor in the University of Vienna. Translated from the German by WARREN WEBSTER, M.D., Surgeon U. S. Army, and JAS. A. SPAULDING, M.D., member of the American Ophthalmological Society, Ophthalmic Surgeon to the Maine General Hospital. 8vo, pp. 219. New York, Wm. Wood & Co., 1881.

This monograph is the first of a series that it is proposed to publish with the "object of popularizing, among practitioners of general medicine, the specialty to which the author belongs," but contains much that will be of interest and value to the ophthalmic surgeon as well.

We have not space to discuss the interesting chapters on the pathology and pathogeny of sympathetic ophthalmia, in which the author freely admits the agency of the optic nerves as well as of the ciliary, but will call attention to a few points on the subject of treatment, which is one of the most practical and important in ophthalmic surgery. Some fifteen or twenty years ago, removal of an eyeball to protect its fellow was theoretically opposed by many surgeons, and practically resisted by most patients, as a barbarous and useless piece of cruelty: now patients usually submit to it with commendable resignation, and too many of the profession fancy that they have an easy answer to all questions that may arise as to the therapeutics of sympathetic ophthalmia in "enucleation." A perusal of this excellent little monograph will convince the latter that the problem is by no means so simple, and that cases may arise that will severely try the soul of the conscientious surgeon. If the function of the eye is destroyed and its form disfigured by traumatic injury, there may be no question about the propriety of its removal as a preventive measure, except in the case of children, where it is followed by defective de-

velopment of the orbit and side of the face. If the patient is a child, if some vision remains or the eye is not much disfigured, the case is not so easily decided. If sympathetic irritation has set in, the author tells us that we should enucleate instantly, "even if the injured eye preserves vision." He strongly opposes the operation in the serous or mild plastic forms of iritis, as he believes it has a tendency to transform them into plastic iridochoroiditis. In sympathetic plastic iridochoroiditis he says that enucleation can do no harm if the injured eye is hopelessly blind, though he has no confidence in the efficacy of any kind of treatment, but that "every one will admit that it is a crime, in a case of pronounced sympathetic iridocyclitis, to enucleate an eye which still possesses vision or in which vision might at a later date be restored," since cases are recorded in which the injured eye regained useful vision while the other became entirely and permanently blind.

The history of optico-ciliary neurotomy is given to date, and the conclusion drawn from it that this operation cannot safely be depended upon as a substitute for enucleation.

As to operative treatment of the sympathetically diseased eye, iridectomy is discouraged in serous or simple plastic iritis, or in the severe form until all irritation has subsided, but is urged in the secondary glaucoma which sometimes results from iritic adhesions.

The unusually pleasant style of the author has been well rendered by the translators, who deserve the thanks of the profession. It is to be hoped that they will be encouraged to go on with the good work that they have commenced so well.

G. C. H.

## GLEANINGS FROM EXCHANGES.

CASE OF CROUP TREATED BY PASSING CATHETERS INTO THE TRACHEA BY THE MOUTH. —Dr. J. W. Paton (*British Medical Journal*), in reporting a case in which catheters passed into the trachea by the mouth obviated the necessity for tracheotomy, calls attention to this method as useful in the treatment of children suffering from croup. The patient upon whom this method was tried was a little child nearly four years of age, who, when first seen, was suffering from intense dyspnoea, quite unable to speak, and his lips of a dark livid color. His cough was brassy and without expectoration. The respirations were 35 per minute, the cartilages of the ribs and sternum being drawn in at every effort to breathe, and crepitation existing over both lungs. The fauces were healthy. The pulse was 144, very weak. A No. 11 prostatic catheter was passed during an attempted inspiration, and without the slightest difficulty.

A severe struggle followed, lasting perhaps a minute or two, the face becoming purple and the eyes staring, with fully-dilated pupils. After a few moments the breathing became easier, considerable frothy, bloody, and purulent mucus having been ejected. The presence of the tube did not prevent his swallowing milk, though sometimes a little was ejected from it during a cough. The tube was retained in place by a strip of adhesive plaster, and the teeth were prevented from closing on it by means of a pear-shaped piece of wood. Six hours after, he was much easier, and could say "yes" and "no" distinctly. The character of the cough continued, and was not altered by the presence of the tube. After it had been in eleven hours, the tube was removed; but shortly after its removal the obstruction reappeared, and a No. 12 gum catheter was then inserted, with good result. After forty-eight hours the tube was removed, and the child made a good recovery.—*Canada Medical Record.*

#### TREATMENT OF SPLENTIS BY ERGOT.—

The value of ergot in ague-cake is generally known, but it is less well established in enlarged spleen from other causes. Dr. W. E. Emanuel, of St. Louis, reports to the *St. Louis Courier of Medicine* the following instance in which no malarial history could be obtained. Mr. F., 43 years of age, had been subject to spasmodic urethral stricture, and probably some vesical catarrh, for more than a year. Two weeks before coming under observation the spleen commenced to enlarge, and was found at the time of examination to cover "nearly the entire abdominal cavity, and extended as far as the border of the liver." It was firm, hard, and very painful. The urine contained an excess of urates and phosphates, and formed a solid coagulum with nitric acid and heat. The patient, from robust health, had fallen away in weight and strength, and apparently it was a mere question of time how soon he would succumb. Thirty-minim doses of Squibb's fluid extract of ergot, thrice daily, gradually increased to sixty, soon produced marked results. In three days the spleen had lost a good deal of its hardness, and was flabby to the touch, though not noticeably reduced in size. In one week there was perceptible diminution, and from that time, day by day, there was marked dwindling, until it almost entirely returned to its normal position. With this reduction of the spleen, the kidneys became decidedly better, the albumen almost entirely ceased, and with buchu, uva ursi, and copaiba, taken as the spleen improved, the urine cleared up, and, at the time of report, convalescence seemed secured and health and strength were almost restored.

#### NERVE-STRETCHING IN LOCOMOTOR ATAXIA.

In the *British Medical Journal* for January 28, 1882, Mr. H. E. Spencer reports a case of chronic spinal affection in which difficulty of

co-ordination in the lower extremities, associated with decided anæsthesia and absent patellar reflex, pointed to lesion of the posterior horns of the gray matter; but the characteristic pains of locomotor ataxia were not present, and the general health appeared excellent. Stretching of the left sciatic nerve was followed by great temporary improvement, increase of sensation, and return of plantar reflexes on both sides. A month later, however, the limb was just as bad as ever. The result was instructive as a test of the effect of the operation upon muscular co-ordination. The interesting points in the case are the restoration of the plantar reflex and the temporary improvement, both in sensation and motion, of the limb operated upon. The operation itself was followed by no bad consequences, either local or general.

GALEZOWSKI ON OPHTHALMIC MEGRIM.—In 1877, before the Congrès International held at Geneva, Dr. Galezowski read a paper based upon seventy-six cases of nervous disorder, which he includes among the affections of the fifth nerve and of the vaso-motor nerves of the retinal centre. He regards ophthalmic megrim as an affection of that part of the fifth pair which supplies vaso-motor nerves either to the visual centres—such as the corpora quadrigemina, the corpora geniculata of the optic thalami, and the chiasma—or to the parts lying more peripherally, such as the optic nerves and retina. In a short paper contributed to a recent issue of the *Lancet* (February 4, 1882) he reports four more cases of the same character, which demonstrate the further important point that ophthalmic megrim, which has hitherto been considered as a mere nervous symptom, may occasionally lead to organic changes in the retina or retinal vessels, in the nature of thrombosis, atrophy of disk, etc.

TRAUMATIC TETANUS TREATED BY SULPHATE OF ESERINE—RECOVERY.—Dr. Layton, in the *New Orleans Medical and Surgical Journal* for March, reports a case of severe tetanus in a boy 11 years of age, occurring three weeks after injury to the foot. Bromides, chloral, cannabis Indica, were tried without good effect. Eserine was then substituted in doses of one-sixty-fourth of a grain (a milligramme) every hour, in the following prescription:

R Eserin. sulphat., gr.  $\frac{1}{6}$ ;  
Glycerin., fʒij;  
Syrup. aurant. cort., fʒixiv;  
Aqua, fʒij. M.

The glycerin being added to prevent change in the eserine. The full adult dose (a teaspoonful) was given at first every hour. At no time were there symptoms of poisoning by the agent, and no contraction of the pupils: in short, nothing but the beneficial effects of the remedy was manifest. The dose was gradually reduced as the symptoms ameliorated. During the week the boy took

three grains in all. The prescription was then discontinued, the only remaining trace of the attack at that time being some rigidity of the jaws, which had entirely disappeared a fortnight later.

**INFANTILE PARALYSIS RELIEVED BY STRETCHING THE SCIATIC NERVE.**—Dr. Simon reports (*British Medical Journal*, February 25) a case of a boy 5 years old who had been for three years under treatment for partial paralysis of right leg. After two years' treatment with electricity, without much benefit, it was decided to stretch the sciatic nerve. This was followed by increased nutrition of the muscles and decided improvement in the manner of walking. Dr. Simon considers the procedure as harmless, and likely to do great good in cases otherwise beyond remedial aid.

### MISCELLANY.

**CHEWING-GUM.**—Forty thousand dollars' worth of chewing-gum is gathered in the State of Maine every year. In Oxford County is a man who makes it his business to collect spruce gum. Every year he buys from seven to nine tons. The gum is found chiefly in the region about Umbagog Lake and about the Rangely lakes. A number of men do nothing else in the winter season than collect gum. With snow-shoes, axe, and a toboggan, on which the gum is packed, they spend days and nights in the woods. The clear, pure lumps of gum are sold in their native state, the best bringing one dollar per pound. Gum not immediately merchantable is refined by a peculiar process. Sieve-like boxes are covered with spruce boughs, on which is placed the gum. Steam is introduced underneath. The gum is melted, is strained by the boughs, and then passes into warm water, where it is kept from hardening until the packer takes it out, draws it into sticks, and wraps it in tissue-paper, when it is ready for market.

The gum meets with a ready sale. There is not a village, town, or city in Maine where it is not in demand. One dealer last year sold fourteen hundred dollars' worth. In the large mill cities, gum has a free sale.—*New Remedies*.

**THE IMPORTATION OF OPIUM INTO CHINA.\***—The following information is taken from a report published in 1881 by Mr. Robert Hart, Inspector-General of Imperial Maritime Customs of China at Peking last year.

About 100,000 chests of opium are annually imported into China. Each chest averages about 100 catties, the catty being equal to about 1½ pounds avoirdupois. The importation is, therefore, equal to about

13,000,000 pounds. The opium being boiled down and prepared loses about thirty per cent. before it is sold for smoking.

The opium pays import duty and other taxes in all amounting to about 1 taël per catty (the taël is equal to 6s.).

The average smoker consumes about  $\frac{1}{15}$  ounce daily, costing him for foreign opium about 10½d.—*New Remedies*.

**THE NORWAY WHALE-FISHERY.**—The whaling-business in Norway is increasing, and engages larger capital each year. Two hundred and eighty whales were caught in 1881, the largest number ever killed in one year off the Norwegian coasts. Five different companies were last year represented by steamers; and the fishermen engaged in the important cod-fisheries off the Finmark have protested strongly against this invasion of their fishing-grounds.—*Oil and Drug News*, March.

The *British Medical Journal* thinks that it is proved that the moderate use of opium in warm climates is a desirable habit. Certainly it is desirable to the British government, as it puts in its treasury about fifty millions of dollars annually.—*Detroit Lancet*.

### NOTES AND QUERIES.

#### OBITUARY.

DR. THOS. H. CATHCART, who died recently in this city of an acute tubercular peritonitis, was only in his twenty-fifth year, but had already shown such extraordinary industry and ability as a teacher of medical science, and such adaptability to the practical duties of his profession, that a brilliant career was everywhere expected for him. Universally and deservedly most popular, he is widely mourned.

### OFFICIAL LIST

**OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM MARCH 19 TO APRIL 1, 1882.**

ALEXANDER, R. H., MAJOR AND SURGEON.—Having reported at these Headquarters, will report to the Commanding Officer, District of New Mexico, Santa Fé, for duty as attending surgeon at District Headquarters, and post-surgeon, Fort Marcy, N. Mex. S. O. 59, Department of the Missouri, March 20, 1882.

TREMAINE, W. S., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty at Fort Porter, N.Y. S. O. 51, Department of the East, March 24, 1882.

DICKSON, J. M., CAPTAIN AND ASSISTANT-SURGEON.—So much of Paragraph 2, S. O. 51, c. s., as relates to him is revoked, and he will proceed to Fort McHenry, Md., and report to the Commanding Officer for duty at that post. S. O. 52, Headquarters Department of the East, March 25, 1882.

GARDINER, JOHN DE B. W., CAPTAIN AND ASSISTANT SURGEON.—To report in person to the Commanding General, Department of Arizona, for assignment to duty. S. O. 71, A. G. O., March 28, 1882.

GARDNER, EDWIN F., CAPTAIN AND ASSISTANT-SURGEON.—To report in person to the Commanding General, Department of the Columbia, for assignment to duty. S. O. 71, A. G. O., March 28, 1882.

ROBINSON, SAMUEL Q., CAPTAIN AND ASSISTANT-SURGEON.—To report in person to the Commanding General, Department of the Columbia, for assignment to duty. S. O. 71, A. G. O., March 28, 1882.

\* Condensed from the Journal of the Statistical Society, December, 1881.